

**Field Manual
No. 1-300**

**HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, DC, 15 July 1998**

FLIGHT OPERATIONS PROCEDURES

CONTENTS

Page

PREFACE	iv
----------------------	-----------

CHAPTER 1. AIRFIELD OPERATIONS

1-1. Organization and Staff	1-1
1-2. Personnel Qualifications and Duties	1-3
1-3. Personnel Constraints.....	1-7

CHAPTER 2. FLIGHT DISPATCH BRANCH

2-1. Personnel and Responsibilities	2-1
2-2. Airfield Flight Operations	2-2
2-3. Communications Center	2-8
2-4. Flight Plans	2-10
2-5. Message Coordination.....	2-11
2-6. Flights Near Sensitive Borders.....	2-15
2-7. Restricted Area Usage	2-15
2-8. Search and Rescue Procedures (VFR Aircraft)	2-15
2-9. VIP and Transient Services.....	2-16
2-10. Airfield Service Requirements	2-16
2-11. Joint-Use Airfield	2-19
2-12. Airfield Facility Recreational Use.....	2-19
2-13. Authorization to Land Foreign-Owned and -Operated Aircraft at Army Airfields	2-20
2-14. Civil Aircraft Use of Army Airfields	2-20

CHAPTER 3. AIRFIELD SERVICES BRANCH

3-1. Personnel and Responsibilities.....	3-1
3-2. Airfield Markings	3-2
3-3. Airfield Maintenance	3-4

DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited.

*This publication supersedes FM 1-300, 22 June 1993.

CHAPTER 4. PETROLEUM, OILS, AND LUBRICANTS SERVICES BRANCH

4-1. Personnel and Responsibilities.....	4-1
4-2. Aircraft Refueling (Servicing).....	4-2
4-3. POL Handling and Safety.....	4-3

CHAPTER 5. AVIATION UNIT OPERATIONS

SECTION I. GARRISON OPERATIONS

5-1. Personnel and Responsibilities	5-1
5-2. Mission Scheduling	5-4
5-3. Dispatch Facilities.....	5-5
5-4. Flight Planning Area	5-6
5-5. Aircrew Training.....	5-6
5-6. Operations Training and Evaluation	5-6
5-7. Aircraft Servicing	5-7

SECTION II. TACTICAL OPERATIONS

5-8. Training	5-7
5-9. Tactical Planning	5-9
5-10. Alert Notification.....	5-9
5-11. Duties and Responsibilities	5-9
5-12. Records and Reports	5-11
5-13. Tactical Operations Center.....	5-12
5-14. Jump TOC Operations.....	5-15
5-15. Operations and Situation Maps	5-16
5-16. Aircrew Missions	5-16
5-17. Combat Search and Rescue Operations.....	5-16

CHAPTER 6. SAFETY

6-1. Aircraft Accident Prevention.....	6-1
6-2. Pre-accident Plan	6-1
6-3. Contingency Plans.....	6-2
6-4. Aircraft Accident Investigation	6-2
6-5. Operational Hazard Report	6-2
6-6. Hazardous Material	6-4
6-7. Aircraft Fire-Fighting and Crash and Rescue Services	6-4

CHAPTER 7. FLIGHT RECORDS

7-1. General.....	7-1
7-2. Forms and Records.....	7-1

Page

7-3. Individual Flight Records Folder	7-2
7-4. File Arrangement	7-4
7-5. Closing Flight Records	7-7
7-6. Transcribing Flight Time	7-8
7-7. Flying Status Management	7-9
7-8. Army Aviator's Flight Record—DA Form 2408-12	7-10
7-9. Temporary Worksheet (Rated Crewmember)	7-15
7-10. Consolidated Worksheet (Rated Crewmember)	7-19
7-11. Temporary Worksheet (Nonrated Crewmember)	7-23
7-12. Consolidated Worksheet (Nonrated Crewmember)	7-29
7-13. Aircraft Closeout Summary (Rated Crewmember)	7-34
7-14. Aircraft Closeout Summary (Nonrated Crewmember)	7-40
7-15. DA Form 759 Closeout	7-46
7-16. Automated Flight Records System (AFRS)	7-63
7-17. Master Files	7-64
APPENDIX A. AIRFIELD MANAGEMENT	A-1
APPENDIX B. FACILITY MEMORANDUM, OPERATIONS LETTER, AND LETTER OF AGREEMENT	B-1
APPENDIX C. EMERGENCY PLANS AND PROCEDURES	C-1
APPENDIX D. FLIGHT INFORMATION PUBLICATIONS AND RELATED AERONAU- TICAL PRODUCTS	D-1
APPENDIX E. POSITION RESPONSIBILITY TRANSFER	E-1
APPENDIX F. SERVICE B SYSTEM	F-1
APPENDIX G. RESTRICTED AREA USAGE FOR NATO MILITARY AIRCRAFT	G-1
APPENDIX H. MISSION SCHEDULE/BRIEFING	H-1
APPENDIX I. MANUALS USED DAILY	I-1
APPENDIX J. MONTHLY EXCEPTION/CERTIFICATION	J-1
APPENDIX K. AVIATOR FLIGHT RECORDS CHECKLIST	K-1
APPENDIX L. NONRATED CREWMEMBER FLIGHT RECORDS CHECKLIST	L-1
GLOSSARY	Glossary-1
REFERENCES	References-1
INDEX	Index-1

PREFACE

This manual is designed to be a one–source document that focuses on the aspects of flight operations. While it contains guidelines for commanders and aviators, the manual is intended primarily for use by flight operations personnel. It outlines the organization and services of flight operations and explains personnel qualifications, duties, and responsibilities. In addition, it provides information on the following subjects: flight dispatch branch; airfield services branch; petroleum, oils, and lubricants services branch; aviation unit operations; safety; and flight records.

The proponent of this publication is HQ TRADOC. Send comments and recommendations on DA Form 2028 directly to Commander, US Army Aviation Center, ATTN: ATZQ–TDS–D, Fort Rucker, AL 36362–5263.

This publication implements portions of STANAG 2952 (Edition One), Procedures for Providing Restricted Areas for NATO Military Aircraft While Using Military Airfields of Other NATO Nations.

Unless this publication states otherwise, masculine nouns and pronouns do not refer exclusively to men.

This publication has been reviewed for operations security considerations.

Chapter 1

Airfield Operations

An Army airfield normally is the hub for aviation support operations and tactical aviation training activities of the command. This chapter briefly describes how the airfield is organized and staffed.

1-1. ORGANIZATION AND STAFF

A recommended airfield organization is shown in Figure 1-1. The command element has supervisory responsibility for airfield operations and joint responsibility for air traffic control (ATC) operations. The ATC headquarters provides command and support to ATC personnel. Day-to-day operations of the ATC facility are under the control and authority of the airfield chain of command.

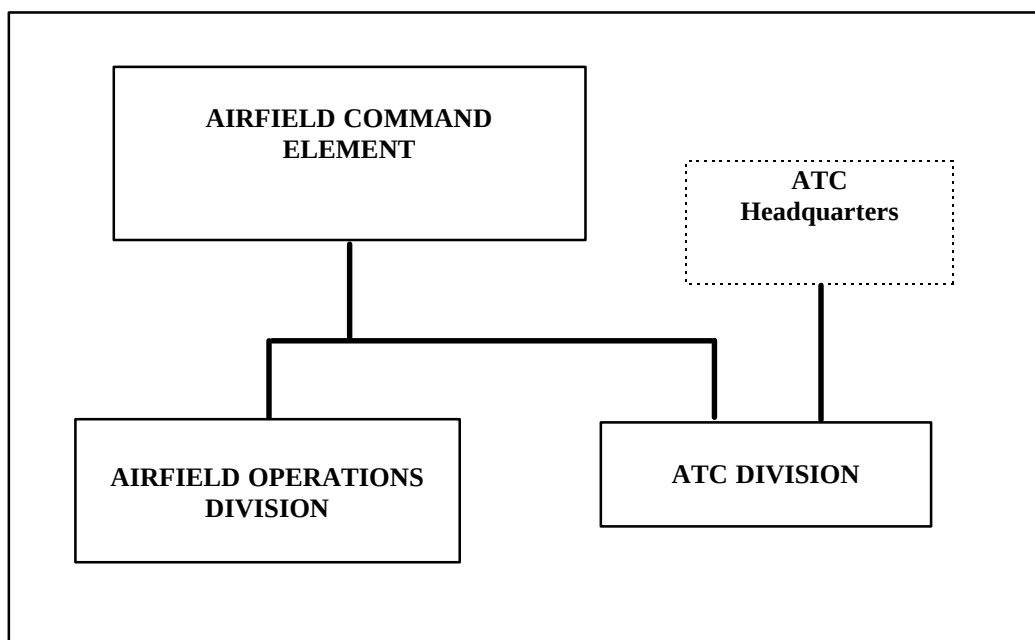


Figure 1-1. Airfield organization

a. *Airfield Operations Division.*

(1) The airfield operations division is shown in Figure 1-2. It consists of a flight dispatch branch; an airfield services branch; and a petroleum, oil, and lubricants (POL) services branch. Chapter 2 discusses the flight dispatch branch; chapter 3, the airfield services branch; and chapter 4, the POL services branch.

(2) The staff of the airfield operations division consists of an operations officer, a safety officer, an airfield noncommissioned officer in charge (NCOIC), and a clerk-typist. It may include an air traffic and airspace (AT&A) officer.

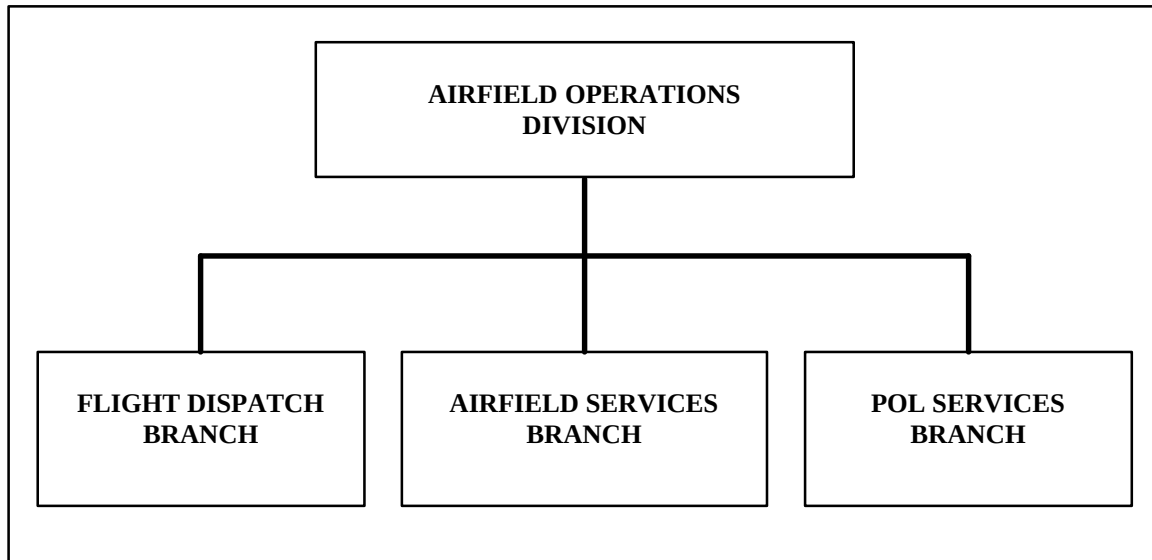


Figure 1-2. Airfield operations division

b. ATC Division.

(1) The organization of the ATC division—shown in Figure 1-3—depends on the number and type of navigational aids and services provided by the airfield. At a minimum, the division includes an ATC section and an ATC maintenance section.

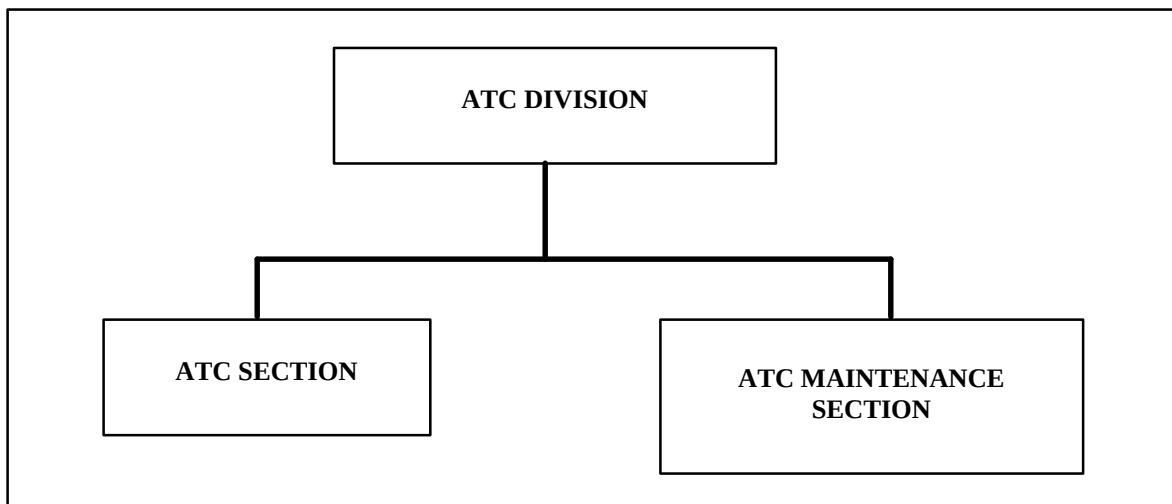


Figure 1-3. ATC division

(2) Either an ATC officer or an ATC chief who is the senior facility NCO supervises the ATC division. Additional staff includes a training NCO and possibly clerical support.

(3) FM 1–303 describes section organization and specific duties within the ATC division in more detail. Paragraph 1–2c outlines some ATC duties.

1–2. PERSONNEL QUALIFICATIONS AND DUTIES

a. *Airfield Commander.*

(1) **Qualifications.** The airfield commander—

(a) Is appointed by the commander of the organization who has controlling authority of the airfield property.

(b) Is an experienced aviator—civilian or military—with some supervisory or command time.

(c) Holds a current military pilot rating or is employed as a Department of the Army (DA) Federal Aviation Administration (FAA)—certified civilian pilot with a current FAA airman's medical certificate.

(2) **Responsibilities.** The airfield commander—

(a) Has primary supervisory and management responsibility for the airfield.

(b) Publishes the local flying rules.

(c) Attends installation planning committee meetings and provides input on issues that affect the airfield.

(d) Attends installation flight standardization committee meetings and provides input on issues that affect the airfield and the local flying area.

(e) Works with local civil authorities, public relations personnel, and liaison officers concerning public relations matters. Examples include noise complaints, environmental issues, public events, and aircraft accidents or incidents.

(f) Works with local contracting offices on airfield services that are not provided by permanent airfield facilities or personnel. Examples include cutting grass, removing snow, painting the airfield, testing electrical grounds, and performing other periodic or routine maintenance. The installation comptroller; Directorate of Engineering and Housing (DEH); Directorate of Plans, Training, Mobilization, and Security (DPTMSEC); and other logistics organizations will be involved in the contracting and hiring process.

(g) Works with the Directorate of Human Resources (DHR), Civilian Personnel Advisory Center (CPAC), on matters relating to the hiring, termination, transfer, and evaluation of civilian employees.

(h) Sets airfield policy and provides guidelines for the use of airfield property by tenant organizations. Examples include parking areas, hours of operation, airfield services, complaint procedures, and interorganization working agreements.

(i) Maintains accountability for installation property within the airfield environment.

(j) Develops air crash, search, and rescue requirements in coordination with the aviation safety officer, medical personnel, fire fighters, and other appropriate authorities.

(k) Provides area map coverage.

NOTE: The responsibilities listed above are neither all-inclusive nor directive in nature. Appendix A contains a list of airfield management considerations.

b. Airfield Operations Officer.

(1) **Qualifications.** The airfield operations officer—

(a) Is appointed by the airfield commander.

(b) Is an experienced aviator—civilian or military—in one or more of the types of aircraft normally flown at the airfield.

(2) **Responsibilities.** The airfield operations officer—

(a) Provides input to the local flying rules that pertain to aircrew procedures. Some examples are the filing of flight plans, the use of airfield services, and the joint use of airspace. Other examples include airfield facility use, night operation agreements, noise abatement, nap-of-the-earth (NOE) training area rules, and other special interest areas. The input provided by the operations officer is aligned with input provided by the AT&A officer, the ATC chief, and the safety officer.

(b) Supervises the flight dispatch branch, the POL services branch, and the airfield services branch.

(c) Ensures that the local hazard map is kept current.

(d) Ensures that airfield facilities are adequate and kept in good repair.

(e) Develops a preaccident plan in cooperation with the ATC chief, the safety officer, the flight dispatch chief, and other personnel from responding agencies.

(f) Reviews personnel training programs for the flight dispatch branch, POL services branch, and airfield services branch.

(g) Recommends personnel for appointment to accomplish specific duties that are not covered in the general duty description. Examples include serving as the building fire warden or the building safety monitor.

c. Air Traffic Control Chief.

(1) Qualifications. AR 95-2 outlines the qualification requirements for the ATC chief.

(2) Responsibilities. The ATC chief—

(a) Supervises all ATC activities on and around the airfield. This includes notifying the flight dispatch branch of outages in navigational or communication systems so that the branch can then notify aircrews operating in the area.

(b) Provides input to the local flying rules on ATC-related matters.

(c) Writes operations letters and letters of agreements (LOAs). These letters establish working agreements between the ATC, flight dispatch, weather, and other sections when clear delineation of authority and responsibility is necessary. (Appendix B shows a sample of an operations letter and a sample of a LOA.)

(d) Establishes ATC training programs to maintain controller currency. Coordinates with the operations division so that aircrews will fly maneuvers needed for ATC currency requirements.

(e) Assists the operations officer in writing the aircraft (or other) mishap plan. (Appendix C discusses emergency plans and procedures.)

(f) Maintains accurate air traffic records. These records help personnel investigate aircraft accidents or incidents and operational hazard reports. They also help personnel locate missing aircraft.

(g) Advises the AT&A officer on airspace matters and assists him in performing his duties.

d. Air Traffic and Airspace Officer. Commanders of units whose mission impacts on the national airspace or host national airspace will designate an installation AT&A officer according to AR 95-2. The appointed person should be a member of the Installation Planning board.

(1) Qualifications. AR 95-2 outlines the qualification requirements for the AT&A officer.

(2) Responsibilities. The AT&A officer—

(a) Represents the airfield commander on all airspace-related matters. Examples include joint-use airspace (JUA), special-use airspace (SUA), altitude restrictions, restricted areas, range restrictions, training areas, areas of overlapping control for ATC purposes, and joint service agreements.

(b) Provides input to the local flying rules on airspace-related matters.

(c) Maintains liaison with local FAA and/or host government agencies.

e. Airfield Safety Officer.

(1) Qualifications. The airfield safety officer—

(a) Holds a current military pilot rating or is employed as a DA FAA–certified civilian pilot with a current FAA airman's medical certificate.

(b) Is a graduate of the Aviation Safety Officers Course conducted at the US Army Safety Center, Fort Rucker, AL, or has completed equivalent training.

(2) Responsibilities. The airfield safety officer—

(a) Represents the airfield commander on all safety–related matters.

(b) Performs duties outlined in AR 385–10, AR 385–40, AR 385–95, DA Pamphlet 385–40, and TC 1–210.

(c) Investigates accidents or incidents involving aircraft or airfield personnel or equipment.

(d) Assists the operations officer in writing the aircraft (or other) mishap plan. (Appendix C discusses emergency plans and procedures.)

(e) Conducts airfield and safety inspections and advises airfield personnel on safety–related matters.

(f) Schedules and conducts safety meetings and advises the airfield commander of potential problem areas.

(g) Provides input to the local flying rules on safety–related matters.

f. Flight Operations Chief.

(1) Qualifications. The flight operations chief—

(a) Should be a graduate of the Flight Operations Specialist Course conducted at Fort Rucker, AL.

(b) Should have a working knowledge of flight dispatch procedures.

(c) Should have completed the basic NCO course for the 93P military occupational specialty (MOS).

(2) Responsibilities. The flight operations chief—

(a) Performs airfield NCOIC duties.

(b) Assists the airfield operations officer and the airfield safety officer in performing their duties.

(c) Supervises the flight dispatch branch and acts as the flight dispatch chief.

(d) Writes standing operating procedures (SOPs) for the airfield operations division and the flight dispatch branch.

(e) Assists the ATC chief in developing operations letters and LOAs.

(f) Develops and conducts training programs.

(g) Ensures that required publications are current and available.

(h) Maintains accountability for installation property in the operations and flight dispatch areas.

1-3. PERSONNEL CONSTRAINTS

a. Personnel organization and duties performed depend on the size and structure of the airfield and the size of the unit or units that the airfield supports. In some cases, the airfield will not have all the positions outlined in the preceding paragraphs. In those cases in which personnel and positions are not available, some functions will be consolidated.

(1) A typical consolidation occurs when the airfield does not have positions for both an airfield commander and an operations officer. In this case, the incumbent who meets the qualifications of both positions will accomplish both functions. Likewise, a consolidation of functions occurs when an AT&A officer is not designated. In this case, there may be a regional AT&A officer or possibly an ATC officer who is also an aviator who may be able to fulfill two functions.

(2) Another typical consolidation is to combine the aviation safety NCO function with the airfield operations NCO function. However, this type of consolidation is recommended only for small airfields.

b. The airfield services branch will be a separate branch only on large airfields. Emergency services are contracted at small- and medium-size airfields, and the airfield NCOIC assumes responsibility for the transient and very important person (VIP) services capability. The POL services branch accomplishes some airfield maintenance functions when they are within the scope of general maintenance and upkeep. Other duties described in Chapter 3 are divided among the personnel who are most qualified to perform them.

c. Consolidation of functions can be accomplished only when the size of the airfield and traffic density are compatible with a smaller staff. Overconsolidation can become a hazard to the safe operation of the airfield and can cause a loss of services.

Chapter 2

Flight Dispatch Branch

Each branch in the airfield organization has specific responsibilities assigned to it as part of the airfield operations. This chapter discusses the functions and responsibilities of the flight dispatch branch.

2–1. PERSONNEL AND RESPONSIBILITIES

Personnel in the flight dispatch branch include—but are not limited to—a branch chief and aviation operations specialists. The number of aviation operations specialists assigned depends primarily on the services provided, the hours of operation, and the table(s) of organization of equipment (TOE) and table(s) of distribution (TDA) of the unit. The flight dispatch branch provides flight planning and filing services to transient and assigned aircrews. Branch organization is influenced to some extent by the physical arrangement of the facilities.

a. Branch Chief. The flight dispatch branch chief—

- (1) Coordinates branch activities under the supervision of the operations officer.
- (2) Supervises and trains aviation operations specialists in their assigned duties.
- (3) Provides flight planning service to include current publications, maps and charts, a notice to airmen (NOTAM) display, and weight and balance forms on each assigned Class II aircraft.
- (4) Prepares work schedules for aviation operations specialists and ensures adequate coverage during peak periods.
- (5) Ensures that the branch SOP provides for immediate notification of the operations officer if an impending or actual emergency or an operations security (OPSEC) violation occurs.
- (6) Processes reports about unidentified flying objects such as kites, balloons, model airplanes, and drones.
- (7) Ensures that airfield advisory procedures are established according to FAA Handbook 7110.10.
- (8) Ensures that ground personnel operating near or on taxiways or runways are briefed thoroughly on two-way radio communication procedures and are familiar with the ATC light signals in the Airman's Information Manual and FAA Handbook 7110.65.
- (9) Establishes and maintains a flight information publication (FLIP) account for the airfield according to AR 95–2. (Appendix D contains information on the establishment and maintenance of a Department of Defense (DOD) FLIP account.)

b. Aviation Operations Specialist. The aviation operations specialist—

- (1) Receives, reviews, and processes flight plans.
- (2) Transmits or records flight data.
- (3) Advises the local control tower on proposed departures and arrivals.
- (4) Notifies the operations officer when an arriving flight is overdue as required by the local SOP and the overdue aircraft procedures in Appendix C.
- (5) Notifies airfield services of the estimated times of arrival and departure to ensure the timely servicing of aircraft.
- (6) Notifies the operations officer of arriving and departing VIPs so that proper honors can be extended.
- (7) Disseminates severe weather warnings to appropriate individuals or agencies according to the local SOP and the emergency plans in Appendix C.
- (8) Informs the operations officer of any OPSEC violations.
- (9) Provides advisory service according to FAA Handbook 7110.65 when the ATC tower facility is not operational or when an ATC tower facility is not available.

2–2. AIRFIELD FLIGHT OPERATIONS

The airfield flight operations must be located near main aircraft parking areas and runways. Locating flight operations facilities other than near the airfield requires major Army command (MACOM) approval. The local airfield commander is responsible for obtaining approval for locating facilities away from the flight line. All flight operations services normally are located in the same building. They include a flight dispatch section, a weather section, a flight planning area, and a pilots' lounge.

a. Flight Dispatch Section. The flight dispatch section is responsible for processing flight plans and other air traffic related data through national and international air traffic systems.

(1) Recommended equipment. The recommended equipment for the flight dispatch section is briefly described below. It includes—

- (a) A frequency modulated (FM), an ultra high frequency (UHF), or a very high frequency (VHF) radio for pilot-to-dispatcher communications.
- (b) Emergency lighting equipment that does not rely on a commercial power source.
- (c) Radios to communicate with personnel operating on the airfield; for example, disaster response agencies, civil engineers, and control tower.

(d) Telecommunications equipment to process flight data and other air traffic information. (In the United States, the FAA provides the telecommunications equipment.)

(e) A console with suitable direct voice-line communications to the control tower, radar approach control, FAA agencies, local rescue agencies, airfield flying units, and additional administrative circuits as required. The console also will include an extension from the primary crash alarm system and a secondary crash alarm system with a circuit activation capability or a suitable Class A telephone.

(2) **Facilities.** The flight dispatch section must have access to adequate facilities or capability to store, issue, and receive classified materials.

(3) **Briefing area.** The flight dispatch section must maintain a briefing area for aircrews. This requirement may be met if there is adequate space in the flight planning room to accommodate aircrews and briefing materials.

(4) Operating instructions.

(a) A current set of operating instructions and ready reference files must be made available as required by the airfield commander. These publications must have sufficiently detailed instructions so that the aviation operations specialists can complete actions without referring to other directives.

(b) Flight operations personnel must maintain—as applicable—local checklists, logs, or similar documentation to support functional area responsibilities. Local instructions may be for—

- ! Inbound and outbound aircraft.
- ! Distinguished visitors.
- ! Aircraft requiring special handling; i.e., air evacuation or hazardous cargo.
- ! Airfield restrictions; for example, prior permission required.
- ! Crash alarm system.
- ! Flight information publications.
- ! Weather warnings and advisories.
- ! In-flight advisories.
- ! Bird strike hazard responses.

(5) Manning and procedures.

(a) A minimum of two persons should be on duty during the hours of operation. The MACOMs; the National Guard Bureau (NGB); or Headquarters, Department of the Army (HQDA), may modify this requirement during periods of critical manning or as necessary.

(b) Shift personnel must not be scheduled for additional duties and details outside the scope of the flight dispatch function unless the requirement in (a) above has been met. However, this does not excuse or preclude enlisted personnel from completing military training requirements.

(c) Each individual working in the flight dispatch section must be assigned two-letter operating initials for use during daily operations.

(d) During shift changes, flight dispatch personnel who are being relieved will brief the incoming shift personnel. (Appendix E provides information on shift change briefings and position transfers.)

(e) Flight dispatch personnel must use DA Form 1594 (Daily Staff Journal or Duty Officer's Log) or other suitable documentation to record significant incidents that occur during each tour of duty. Airfield commanders must specify the items or issues that require documentation and must review each entry. Personnel will not release any information about an accident or incident unless directed to do so by the airfield commander or the operations officer.

b. Weather Section.

(1) The weather section should be located near the flight dispatch section. Air Weather Service (AWS) facilities should be available to provide weather forecasting or briefing service to aircrews. If local AWS support is not available or available only part-time, a direct landline or Defense Switching Network (DSN) line to an AWS or other MACOM-approved weather facility will satisfy this requirement. A dedicated phone for weather briefings is provided for aircrew use. National Weather Service (NWS) forecast offices or flight service stations (FSSs) may be contacted when use of an AWS facility is not practical. The Airman's Information Manual contains additional information on alternate means of obtaining weather briefings.

(2) Ideally, a weather service should be available either face-to-face or by direct-line telephone to the flight planning or flight dispatch facility. If neither is available, flight dispatch personnel will contact the nearest weather servicing facility to obtain a local area weather report. Flight dispatch personnel will call for an updated report hourly or sooner if weather conditions occur that were not forecast. Aircrews planning to fly outside the area covered by the report will contact the weather servicing facility for a specialized weather briefing.

(3) The local area weather briefing will contain the following information:

(a) Area covered by the report in nautical miles (nms).

(b) Date and valid times in Coordinated Universal Time (UTC).

(c) Cloud layers in hundreds of feet and sky coverage.

(d) Visibility (in local format) and obstructions to visibility.

(e) Surface wind direction and speed.

(f) Any forecast changes to (c) through (e) above during the valid period, when the changes are expected to occur, and any pertinent remarks.

- (g) Weather warnings or advisories.
 - (h) Maximum surface temperature and pressure altitude.
 - (i) Minimum ceiling and visibility.
 - (j) Forecast surface turbulence and altitude where turbulence ends.
 - (k) Forecast icing at surface or low altitude.
 - (l) Forecaster's and flight dispatcher's initials.
- (4) A specialized weather report may be required to provide the following information:
- (a) Wind direction and speed and temperature data at intervals of 1,000 feet from the surface. (This information should be provided up to the highest altitude flown by aircraft operating in the area covered by the report.)
 - (b) Freezing level.
 - (c) Maximum temperature, pressure altitude, and density altitude in Fahrenheit and Celsius.
 - (d) Minimum temperature in Fahrenheit and Celsius.
 - (e) Sunrise and sunset times.
 - (f) Moonrise and moonset times and percentage of illumination.

c. *Flight Planning Area.*

(1) *Establishment and supervision.* The airfield operations officer is responsible for establishing and operating a flight planning room. The flight dispatch chief is responsible for the general appearance, efficient administration, and operation of the flight planning room.

(2) *Location and operation.* The flight planning room should be located near the weather office and dispatch desk. Recommend area be separated from other work areas and be suitable for aircrew briefings and mission planning. The area should be clean, comfortable, and orderly. It must be equipped with current aeronautical information and facilities to enable aircrews to complete self-briefings and flight planning, as appropriate. Aviation operations specialists should be available to assist pilots, when requested, and to provide briefings on local arrival and departure procedures.

(3) *Equipment and furnishings.* The equipment and furnishings listed below are considered desirable for a well-equipped flight planning area. Physical space and equipment availability will dictate how the flight planning room is furnished.

(a) An installation telephone will be available for the authorized use by aircrews. There will be a direct line to the nearest weather facility so that aircrews can find out current weather

conditions during off-duty hours. If the airfield has a 24-hour weather service, this telephone line is not required. An installation and a local telephone directory should be near the telephone. A chart listing important telephone numbers (billeting, transportation, mess hall, flight surgeon, maintenance, operations officer, and safety officer) also will be displayed near the telephone. Both duty and afterduty numbers should be listed.

(b) Two clocks are required: one set on UTC and the other set on local time. If only one clock is available, it should indicate UTC. The clocks should be large enough to be readily seen from anywhere in the flight planning room. If possible, they should be 24-hour clocks.

(c) The flight planning area must have a flight planning table that is large enough to lay out an entire en route chart or sectional navigational chart. The table should be tilted up slightly so that aviators do not have to bend excessively to use it during their planning. Plexiglas or glass should be mounted on the table and a local area en route chart and sectional chart placed under the glass. Other items that could be placed under the glass for aircrew convenience are sample flight plans, sample weight and balance forms, and other appropriate sample forms. For convenience, the table should be arranged so that pilots can work on either side. Flight planning often takes 45 minutes or longer to complete; therefore, stools should be available for pilot comfort. If stools cannot be made available, carpet or rubber matting should be placed on the floor to reduce fatigue. Bins can be built under the edge of the table—as shown in Figure 2-1—to store blank forms such as DA Forms 2696-R (Operational Hazard Report) and 3588 (COMM Card); DD Forms 175 (Military Flight Plan), 175-1 (Flight Weather Briefing), 365-4 (Weight and Balance Clearance Form F) , and 1801 (DOD International Flight Plan); and performance planning cards. E6B computers and flight plotters should be attached to the flight table for aircrew convenience. These should be be easily used but not removed from the table.

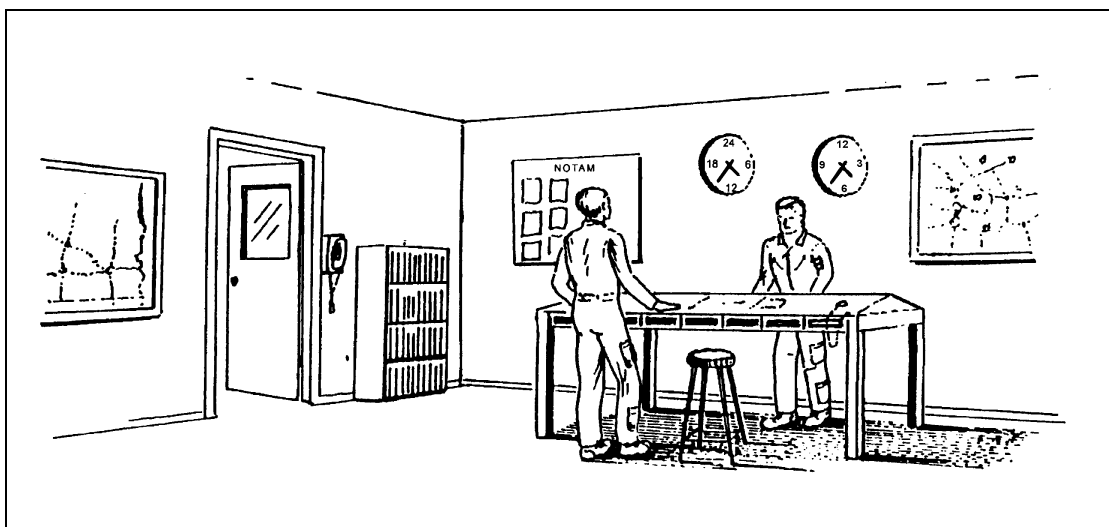


Figure 2-1. Typical flight planning table

(d) Reference publications should be made available and conveniently located near the flight planning table. They should include DOD FLIPs, Army regulations, a local airfield SOP,

aeronautical charts, aircrew reading file, and FAA regulations. Aircrew training manuals (ATMs) and aircraft operator's manuals for each type of aircraft that normally uses the airfield also should be available.

NOTE: The listing above is only a sample of reference publications that are available. The local operational area may dictate additional materials that should be made available.

(e) Wall displays of planning charts and other aeronautical information pertinent to the airfield and area of operations must be available. Examples of wall displays are—

- ! A crash rescue map.
- ! Traffic pattern diagrams.
- ! A visual flight rules/instrument flight rules (VFR/IFR) planning chart of the continental United States (CONUS).
- ! A sectional aeronautical chart depicting the local flying area, military operating areas, special VFR corridors and altitudes, and traffic routes to and from other airports that may conflict with local or transient traffic.
- ! A 1:50,000 map of the local flying area showing range information, flight and wire hazards, and NOE and instrument training areas. (This map should be updated, at a minimum, every 30 days. The latest date that the map was updated should be posted on or near the map.)
- ! A NOTAM system as prescribed in AR 95–10. (Material on the NOTAM display board must be appropriate to the geographic location and cover the area of airfield clearance responsibility.)
- ! A large-scale airfield diagram that depicts runway and taxiway information, obstructions, and other pertinent airfield information.
- ! Planning charts with a cord-type mileage indicator on them that shows statute and nautical miles.
- ! A weather briefing, as described in paragraph 2–2b, when weather service is not available.

(f) Charts that depict helpful information should be displayed in a prominent place. The information should include radio frequencies for ground control, tower, approach control, ground-controlled approach, and departure control. Other appropriate information includes field elevation, airfield diagram showing traffic patterns and altitudes, and local nondirectional radio beam (NDB) frequencies for use in radio checks.

(g) A bulletin board or similar display should be available. It should contain only pertinent flight information and reference material such as local IFR recovery procedures and lost communication procedures for the airfield. Also, a safety bulletin board should be displayed. This bulletin board should contain current safety-related publications and safety posters.

(h) Other items that should be included in the flight planning room are an ear protector dispenser and a pencil sharpener. Equipping a well-organized and useful flight planning room is limited only by the imagination of the operations officers and flight dispatch chiefs.

d. Pilots' Lounge. A pilots' lounge should be established in an area easily accessible to the flight planning and dispatch facilities. It should be furnished with comfortable furniture. If a snack bar or an eating facility is not available in the immediate vicinity, food- and drink-dispensing machines should be placed in the lounge. For convenience, a Class A telephone could be made available in the lounge as well as in the flight planning room. Phone numbers of installation facilities should be displayed near the phone.

2B3. COMMUNICATIONS CENTER

Flight dispatch personnel in the communications center are responsible for transmitting flight plan proposals by Service B or Service F to the flight service facility that services the airfield. They also are responsible for providing an airfield advisory service to aircraft that use the airfield when the control tower is nonoperational. Flight movement messages are transmitted according to AR 95–11 and FAA Handbook 7110.10. (These messages are described in paragraph 2–5a.) Airfield advisory information is provided according to FAA Handbook 7110.10.

NOTE: Outside the continental United States (OCONUS) flight service requirements may vary depending on the location of airfields and/or heliports. Military and civilian airfields based in CONUS use the FAA communications system. Military airfields and/or heliports based OCONUS may have additional requirements placed on them by host nation air traffic managers. In those cases, a host nation letter of agreement (LOA) pertaining to air traffic service support may be required.

a. Flight Service Communications System. This system is a series of microprocessors located at air route traffic control centers (ARTCCs) nationwide. The microprocessors are connected by high-speed circuits to the Aeronautical Fixed Telecommunications Network computer in Kansas City, MO. Remote base operations (BASOPS) and FSS users are connected to a microprocessor at their host ARTCC. This series of microprocessors is known as Service B. Service B is a part of the National Airspace Data Interchange Network. Service F is a system of interphone circuits that is used when Service B is inoperative or when a BASOPS or an FSS does not have a Service B capability. Service B or interphone circuits interconnect all stations. A tie-in FSS services each military airfield. FAA Handbook 7350.6 should be used to determine the tie-in FSSs. The military BASOPS routes flight movement messages to the appropriate military BASOPS and/or the tie-in FSS. If necessary, the tie-in FSS relays movement messages to and from the sending BASOPS.

(1) **Flight service stations.** Flight service stations are operated by the FAA. They perform a number of services to Army aviation personnel. The FSS—

(a) **Receives air traffic control clearances.** When filing an IFR flight plan, the dispatcher transmits it by Service B to the ARTCC servicing the departure area. If Service B is not available, the dispatcher transmits the flight plan by telephone to the tie-in FSS or to the ARTCC servicing the departure area. The IFR clearance is then delivered directly by Service B by the host ARTCC to the tower. It also may be delivered indirectly by Service B to the appropriate approach

control or FSS who, in turn, will relay the clearance by interphone to the tower or BASOPS per FAA Handbooks 7110.10 and 7110.65.

(b) *Forwards departure and inbound messages.* After the aircraft departs a military installation, the dispatcher transmits the VFR and/or IFR departure message to the appropriate military BASOPS or the tie-in FSS. If required, the FSS relays the departure and/or inbound message to the destination of intent. Stopover, nonstop (VFR and/or IFR) local flights—those flights that depart from one location, fly to another, and then return to their point of origin—do not require a departure message.

(c) *Initiates overdue actions.* The FAA—under the National Search and Rescue Plan—is responsible for initiating overdue actions on all flights for which flight plans are entered into the FAA system. The exception is military flights. The military destination host BASOPS is responsible for conducting the preliminary communications search. The destination tie-in FSS is responsible for all extended communication search actions. (Appendix C provides additional information on overdue actions.)

(d) *Receives and coordinates in-flight changes in destination.* If a change in the destination is made in flight, the pilot transmits this information to the nearest FSS. The FSS advises the original point of destination, the new point of destination, and the point of departure.

(2) *Destination operations office.* This office acknowledges the receipt of inbound flight messages from the destination FSS or military BASOPS. It then—

(a) Transmits the actual arrival time of VFR and/or IFR aircraft to the tie-in FSS, if the destination is not equipped with Service B, so that the flight plan may be closed.

(b) Advises the tie-in FSS—if the destination is not equipped with Service B—that a part of a visual flight rule (VFR) and/or an IFR stopover flight plan may be closed.

(c) Notifies the tower of the impending arrival.

(d) Advises the pilot if a hazardous condition has developed at the pilot's destination since departure. The destination operations office for military airports or the FAA for civilian airports then initiates an in-flight advisory. For IFR flights, the advisory is sent through ATC en route or terminal facilities to the pilot. For VFR flights, the advisory is sent through the FSS or terminal ATC facilities to the pilot.

(e) Conducts a local search of all adjacent flight plan area airports and a communications search when an aircraft is overdue.

(3) *Authorized messages.* Only those messages necessary for ATC or air safety are transmitted.

(4) *Message priority.* If more than one message is on hand for transmission, they must be transmitted in order of priority. Priority 1 and 2 messages are transmitted within 5 minutes after receipt of the required information.

(a) **Priority 1**—emergency messages. Include essential information on aircraft accidents or suspected accidents. After an actual emergency, give a lower priority to messages relating to the accident.

(b) **Priority 2**—clearance and control messages.

(c) **Priority 3**—movement and control messages in the following order: progress reports, departure/arrival reports, flight plans, movement messages on IFR aircraft.

(d) **Priority 4**—movement messages on VFR aircraft.

(5) **Priority interruption.** When transmitting an emergency or control message, use the word "emergency" or "control" to interrupt lower priority messages.

b. Flight Information Transmission and Receipt. Flight information will be transmitted according to FAA Handbooks 7110.10 and 7110.65.

c. Operating Initials Assignment. Flight operations personnel will be assigned two-letter operating initials to use when identification of the individual is necessary. The flight dispatch chief will assign the operating initials and maintain a current listing of them. No two people should be assigned the same operating initials. Operating initials are usually based on the first and last letters of the individual's last name.

d. Aircraft Identification.

(1) **Military aircraft.** Identify military aircraft according to FM 1–402; FM 44–80; and DOD FLIP, General Planning.

(2) **Special mission aircraft.** When special mission aircraft cannot be identified by their call sign, explain under REMARKS in the flight plan. For example, if Air Force Systems Command (AFSC) aircraft are engaged in flight test operations, enter AFSC flight test mission in the REMARKS section of each flight plan or message.

(3) **Military SAR flights.** When military aircraft are on a search and rescue (SAR) flight, insert the word "rescue" between the service prefix and the prescribed markings; for example, "Air Force rescue 12345."

e. Military Code System. DOD FLIP, General Planning, contains information on flight plan, mission, and service codes.

2–4. FLIGHT PLANS

AR 95–1 states that no aircraft will be flown unless a civil or military flight plan (DD Form 175, DD Form 1801, or FAA Form 7233–1 (Flight Plan) has been filed. Local commanders will establish policies specifying the flight plans to be used. FAA Handbook 7110.10; the Airman's Information Manual; and DOD FLIP, General Planning, provide details on flight plan procedures.

2-5. MESSAGE COORDINATION

a. *Flight Movement Messages.* AR 95-11 and FAA Handbook 7110.10 contain information on the transmission of flight movement messages. The specific information to be transmitted depends on the type of flight plan and the agency to receive it. The information below will be sent to the agencies listed when filing a flight plan within CONUS or when sending flight information internationally.

(1) *Proposal to tower.*

- ! Type of proposal (VFR or IFR).
- ! Aircraft identification.
- ! Aircraft designation/transmitter distributor (TD) code.
- ! Proposed time of departure.
- ! Destination.
- ! VIP code; pertinent remarks.
- ! Your operating initials.

(2) *IFR flight plan (proposal) message to ARTCC.*

- ! Type of message (IFR flight plan).
- ! Aircraft identification.
- ! Aircraft designation/TD code.
- ! Estimated true airspeed.
- ! Point of departure.
- ! Proposed departure time.
- ! Initial cruising altitude.
- ! Standard instrument departure and route of flight (first leg only).
- ! Destination (first stop).
- ! Estimated time en route.
- ! Remarks (capabilities and limitations of the aircraft).
- ! Your operating initials.

(3) *Outbound to the flight service station.*

- ! Type of outbound (VFR or IFR).
- ! Aircraft identification.
- ! Aircraft designation/TD code.
- ! Point of departure.
- ! Destination.
- ! Estimated time of arrival.
- ! VIP code; pertinent remarks.
- ! Your operating initials.

(4) *Outbound with stopover to flight service station.*

- ! Type of outbound (VFR or IFR with stopover).
- ! Aircraft identification.
- ! Aircraft designation/TD code.
- ! Point of departure.
- ! Destination (first stopover).
- ! Estimated time of arrival for first stopover.
- ! Remarks applicable to this leg only.
- ! Slant. (This word is interpreted by the FSS that subsequent legs are to follow.)

(a) *On VFR flight plan.*

- ! Destination (subsequent to first leg).
- ! Estimated time en route.
- ! Remarks (applicable to this leg and then to the entire flight).
- ! Void time (date–time group in six digits).
- ! Repeat from the slant as necessary for subsequent VFR legs.
- ! Your operating initials.

(b) *On IFR flight plan.*

- ! True airspeed.
- ! Point of departure.
- ! Proposed departure time.
- ! Altitude.
- ! Standard instrument departure and route of flight.
- ! Destination.
- ! Estimated time en route.
- ! Remarks (capabilities and limitations of the aircraft).
- ! Void time (date-time group in six digits).
- ! Repeat of IFR steps, to include the slant as necessary, for subsequent IFR legs.
- ! Your operating initials.

(5) *Inbound from the flight service station.*

- ! Type of inbound (IFR or VFR).
- ! Aircraft identification.
- ! Aircraft designation/TD code.
- ! Point of departure.
- ! Destination (only if servicing more than one destination).
- ! Estimated time of arrival.
- ! Remarks.
- ! Their operating initials (reply with yours).

(6) *Inbound to tower.*

- ! Type of inbound (VFR or IFR).
- ! Aircraft identification.
- ! Aircraft designation/TD code.

- ! Point of departure.
- ! Estimated time of arrival.
- ! VIP code; pertinent remarks.
- ! Your operating initials.

(7) Arrival from tower (of previous inbound).

- ! Type of arrival (IFR or VFR).
- ! Aircraft identification.
- ! Actual time of arrival.
- ! Their operating initials (reply with yours).

(8) Arrival to FSS (of previous inbound).

- ! Type of arrival (IFR or VFR).
- ! Aircraft identification.
- ! Point of departure.
- ! Actual time of arrival.
- ! Point of arrival.
- ! Your operating initials.

b. Remain Overnight Messages.

(1) Content. When transmitting a remain overnight (RON) message to the tie-in FSS, only the information listed below will be sent in the order shown.

- ! Base or bases to receive the message (name or location identifier).
- ! Other addressees at the base of delivery.
- ! Aircraft identification.
- ! Aircraft designation.
- ! Pilot's last name.
- ! The term "RON."

! Location identifier of base where the aircraft will remain overnight.

! Date or dates.

! Remarks. (Keep to the absolute minimum.)

(2) Delivery. The FAA transmits RON messages to the BASOPS. The BASOPS is responsible for delivering final or multiple RON messages to additional addressees at the same station. RON messages about VIPs require immediate delivery.

c. Service B Messages. AR 95-11 and FAA Handbook 7110.10 contain information on the transmission of flight movement messages within both the national and international airspace systems via Service B. Appendix F discusses Service B messages.

2-6. FLIGHTS NEAR SENSITIVE BORDERS

Commanders who are responsible for flight operations near politically sensitive borders will publish specific and detailed instructions. These instructions will prescribe—

a. Procedures for border orientation flights, pilot proficiency qualifications, currency requirements for both visual and instrument flight procedures, and all OPSEC procedures.

b. Detailed emergency procedures for all foreseeable contingencies such as equipment malfunction and pilot disorientation.

c. Sufficient map and chart coverage of the general area for the planned flight route.

d. Minimum requirements for preflight briefings and flight planning.

e. Periodic review of operating instructions in flight information publications to preclude inadvertent border overflights.

f. Publication requirements for instrument and radio navigation.

2-7. RESTRICTED AREA USAGE

Restricted areas may be used when a request is sent through diplomatic or North Atlantic Treaty Organization (NATO) channels by the visiting nation or NATO command, as a result of an in-flight emergency, or through bilateral agreements between NATO nations. Appendix G standardizes the procedures for granting the use of restricted areas by NATO military aircraft.

2-8. SEARCH AND RESCUE PROCEDURES (VFR AIRCRAFT)

Appendix C contains overdue aircraft procedures. This appendix also discusses emergency plans, the preaccident plan, and the National Search and Rescue Plan.

2–9. VIP AND TRANSIENT SERVICES

a. The operations officer is responsible for ensuring that proper courtesies and services are provided to VIPs visiting the airfield and for supplying services to transient personnel using airfield facilities. The flight dispatch chief is responsible for ensuring that VIP and transient facilities are clean, comfortable, and properly equipped.

b. An area should be designated as a VIP lounge to accommodate visiting dignitaries. The lounge should be equipped with furnishings that are comfortable and convenient. Many times VIPs will be required to wait while their aircraft is serviced or until it arrives for their pickup. Regardless of how well the airfield functions, a visitor's most lasting impression of an airfield may be of the available facilities or the lack of facilities. There are no established criteria for a VIP lounge. However, comfort and convenience should be the primary consideration in establishing this facility.

2–10. AIRFIELD SERVICE REQUIREMENTS

a. Airfield Certification. The FAA requires airports in any state, territory, or possession of the United States that serve FAA–certified air carriers to be certified under FAR, Part 139. The exceptions are when—

- (1) The airport has been certified under a grant of exemption issued by the FAA to the DOD.
- (2) The airfield serves as an authorized weather alternate for the air carrier.
- (3) The air carrier is under an exclusive contract to an element of the Department of Defense (DOD) and is located at a DOD airfield.
- (4) The air carrier is an air taxi operation that is excluded from the requirements of FAR, Part 139.

b. Airfield Certification Requests. Requests for initial or renewal airfield certification must be completed according to AR 95–2.

c. Inspection Authority. The FAA—or an appropriate Army authority—may inspect a certified airfield to determine if it complies with FAR, Part 139, or the grant of exemption. If the airfield fails the inspection, its certification may be revoked.

d. Airfield and Navigational Aid (NAVAID) Engineering Survey. AR 95–2 outlines the procedures for conducting the airfield and NAVAID engineering survey.

e. Airfield Operations Manual. Airfield commanders are responsible for preparing and maintaining an airfield operations manual. This manual establishes operating procedures, describes facilities and equipment, assigns responsibilities, and contains other pertinent information on operating the airfield. It also must include—

- (1) The lines of succession of airfield operational responsibility.
- (2) Each current exemption issued to the airfield under the provisions of FAR, Part 139.

- (3)** Any limitations imposed by the FAA.
- (4)** A grid map or other means of identifying locations and terrain features on and around the airfield that are significant to emergency operations.
- (5)** The system of identifying runways and taxiways.
- (6)** The location of each obstruction required to be lighted or marked within the airfield's area of authority.
- (7)** Rules for the placement of obstructions and regulatory requirements regarding the construction of items considered to be an obstruction.
- (8)** A description of each movement area available for aircraft, its safety areas, and each emergency access road that services it.
- (9)** Procedures for avoiding the interruption or failure of utilities servicing facilities or NAVAIDs that support air carrier operations.
- (10)** Procedures for maintaining paved, unpaved, and safety areas.
- (11)** A description of and procedures for maintaining the marking and lighting systems.
- (12)** A snow and ice removal and/or control plan and a grass control plan.
- (13)** A description of the facilities, equipment, personnel, and procedures for complying with rescue and firefighting requirements.
- (14)** Procedures for complying with the requirements that pertain to hazardous substances and materials.
- (15)** A description of and procedures for maintaining traffic and wind direction indicators.
- (16)** An emergency plan.
- (17)** Procedures for conducting the self-inspection program.
- (18)** Procedures for initiating airfield and/or heliport engineering surveys according to AR 95-2.
- (19)** Procedures for controlling ground vehicles.
- (20)** Procedures for protecting NAVAIDs.
- (21)** Procedures for removing, marking, or lighting obstructions.
- (22)** Procedures for protecting the public.
- (23)** A wildlife hazard management plan.

(24) Procedures for reporting the condition of the airfield.

(25) Procedures for identifying, marking, and reporting construction and other unserviceable areas.

(26) Copies of all approved airfield waivers.

(27) Airfield pavement evaluations.

f. Air Crash, Search, and Rescue Map.

(1) All Army airfields or heliports are required to have and maintain an air crash, search, and rescue (ACS&R) map according to AR 385–95 and AR 420–90. Both air and ground rescue personnel use the map to locate and reach the site of an aircraft accident. All personnel who may assist in the rescue must be familiar with the map and the area depicted.

(2) The installation or airfield commander authorizes the scale of the ACS&R map. The coverage of the map will extend a minimum of 15 nautical miles (nms) according to AR 420–90. The map should be centered on the middle of the airfield, the control tower, or a suitable NAVAID located within 1 nm of the airfield as determined by the airfield commander. It should contain, at a minimum, 3–, 5–, and 7–nm concentric circles. A simple alphanumeric grid overlay will be developed and used with the map to aid in the rapid location of mishap sites. The locations of all airfields, helipads, hospitals, and firefighting facilities within the map's area of coverage should be clearly marked. AR 95–2 contains additional information on ACS&R maps.

(3) The ACS&R map will be coordinated with the rescue agencies of adjacent airfields to ensure a compatible design for effective rescue operations. The airfield commander is responsible for ensuring that all agencies that provide emergency assistance are given a standardized map. Failure to provide a standardized scale map to each agency may cause confusion and unnecessary delay when emergency assistance is required. Likewise, an airfield diagram should be sectioned off in the alphanumeric format and provided to each agency for easy airfield reference when personnel respond to emergency situations on the airfield.

g. Facility Memorandums. The operations officer and the ATC facility chief issue facility memorandums to regulate or standardize operations within a facility. These memorandums contain instructions on administrative or operational practices and procedures within the facility. Facility memorandums may be of a temporary or an informative nature. If the information in a facility memorandum is of a permanent nature, the memorandum is incorporated into the airfield operations manual. (Appendix B shows a sample of a facility memorandum.)

h. Letters of Agreement. LOAs are established between the US Army and other services and between centers. They also are established between ARTCCs and airfield towers and between ARTCCs and terminal approach control (radar) facilities on different airfields. When operations are conducted in foreign countries, LOAs are established according to International Civil Aviation Organization (ICAO) rules. If requirements change for any party signing the letter, the change will be written. The coordination requirement is the same as for the original letter. (Appendix B shows a sample of an LOA.)

(1) Concerned parties must review and update all LOAs that pertain to their areas of operation at least once annually, beginning with the effective dates of the letters. This ensures timeliness and conformance with current policies and directives. The parties concerned will record the review by signing and dating the letter.

(2) LOAs define interfacility or interagency responsibility and coordination requirements. They establish or standardize operating procedures and describe special operating conditions or specific ATC procedures. The letters describe procedures or minimum ceiling and visibility criteria that differ from those in FAA Handbook 7110.65 or other pertinent directives that satisfy a military requirement. They also delegate areas of control jurisdiction and establish conditions of area use. This includes establishing procedures for the coordinated control of traffic when traffic patterns of two or more airfields conflict or when airfield traffic areas overlap. These letters describe operations security procedures when an OPSEC incident requires notifying the host country.

i. Operations Letters. Operations letters are established between ATC facilities or between ATC facilities and other Army agencies located on the same airfield. (Appendix B shows a sample of an operations letter.) If the requirements change for any party signing the letter, the change must be written. Coordination and processing are the same as for the original letter. Operations letters—

(1) Supplement established operational or procedural instructions.

(2) Describe special operating conditions or specific ATC procedures.

(3) Establish or standardize operating procedures.

(4) Establish responsibilities for operating airfield equipment, providing emergency services, and reporting operating limits and hazards.

2–11. JOINTBUSE AIRFIELD

A joint-use airfield is an Army installation where agreements exist between the Army and civil authorities for the civil aviation use of Army airfield facilities. AR 95B2 contains information on the policies and procedures for joint-use airfields.

2–12. AIRFIELD FACILITY RECREATIONAL USE

a. Sports Parachute Club. AR 215–1 prescribes the procedures that govern the participation of Army personnel in sport parachuting. It also describes the required procedures for establishing and operating military sport parachuting clubs.

b. Flying Club. When an Army flying club is established at an Army airfield, the airfield operations officer may be responsible for carrying out supervisory and administrative duties. AR 215–1 contains the rules that govern the operation of these clubs. In particular, the operations officer will assist the flying club in establishing local flying rules and safety programs. He also will ensure that FAA rules and regulations are followed. Airfield operations will provide the flying club with automatic distribution of the DOD FLIP, as required, at the level authorized by AR 95–2.

2–13. AUTHORIZATION TO LAND FOREIGN–OWNED AND –OPERATED AIRCRAFT AT ARMY AIRFIELDS

a. All foreign aircraft operators desiring to land on an Army installation in the United States must obtain an aircraft landing authorization number (ALAN) issued by the US Army. Refer to AR 95–2 for the procedures. The intent is to ensure security, diplomatic coordination with the State Department, customs control, and liability protection (i.e., insurance and hold harmless requirements).

b. If an unauthorized foreign aircraft lands on an Army installation, the following information is required to be relayed to the US Army Aeronautical Services Agency for coordination with the State Department:

- (1)** Type of aircraft.
- (2)** Tail number (if known).
- (3)** Callsign.
- (4)** Name of pilot.
- (5)** Total number of personnel in crew.
- (6)** Total number of passengers (also, identify very important persons (VIPs) or special passengers and any honors or special request).
- (7)** Purpose of trip.
- (8)** Aircraft itinerary, estimated time of arrival (ETA), location, and estimated time of departure (ETD) for each stop. (Identify location of customs stop.)
- (9)** Hazardous cargo and number of weapons on board for each leg of flight.
- (10)** Requirements for fuel or services at each stop.
- (11)** Method of payment for fuel and services.
- (12)** Additional remarks or special requirements such as hotel reservations or ground transportation requests.
- (13)** Point of contact and telephone number.

2–14. CIVIL AIRCRAFT USE OF ARMY AIRFIELDS

a. Civil aircraft are not permitted to use an Army airfield or land an Army installation unless they possess an approved Civil Aircraft Landing permit (CALP). AR 95–2 contains the procedures for CALPs.

b. Operations personnel should require the pilot of a civil aircraft to FAX their approved CALP to operations before granting a prior permission required (PPR). The airfield commander has the authority to approve the first time landing of a civil aircraft in order for the pilot to complete the CALP documentation.

Chapter 3

Airfield Services Branch

The airfield services branch is responsible for the ground handling of aircraft and the inspection and general policing of the airfield and its facilities. The branch also is responsible for operating its assigned vehicles. Chapter 3 discusses the branch's responsibilities, the criteria for marking airfields, and airfield maintenance.

3–1. PERSONNEL AND RESPONSIBILITIES

The airfield services branch includes a branch chief, shift supervisors, and aircraft service personnel.

a. Branch Chief. The branch chief—

- (1) Coordinates branch activities under the supervision of the operations officer.
- (2) Prepares an SOP that outlines the duties and responsibilities of branch personnel.
- (3) Ensures that branch personnel are properly trained and qualified to perform their assigned duties.
- (4) Assigns specific personnel responsibilities and ensures that duty rosters and performance records are properly maintained.
- (5) Ensures that a daily inspection of the airfield is conducted.

b. Shift Supervisors. Shift supervisors—

- (1) Inspect the airfield at least once during the shift—to include runways and taxiways—for maintenance, police, and OPSEC considerations and requirements.
- (2) Supervise and train assigned personnel in their duties.
- (3) Coordinate with other branches concerning VIPs, transient and assigned aircraft, transportation requirements, and airfield conditions.

c. Aircraft Service Personnel. Aircraft service personnel—

- (1) Provide and operate vehicles, as required, and perform operator maintenance in compliance with applicable technical manuals.
- (2) Provide housekeeping services.
- (3) Stand fireguard for all aircraft starting, if required.
- (4) Look for and report OPSEC violations.

- (5) Serve as aircraft ground guides and marshals.

3–2. AIRFIELD MARKINGS

FAA Advisory Circular 150/5340–1D and TM 5B823–4 contain the criteria for marking airfields. These publications dictate the proper procedure for the layout and marking of a new airfield. This paragraph covers specific information on repainting existing markings.

a. Color Markings. Runways will be marked with white reflective paint. Taxiways will be marked with yellow reflective paint.

b. Marking Materials. Paint used to mark or re-mark runway and taxiway pavement will conform to the criteria in Corps of Engineers Guide Specification CEB820 and to the following specifications:

- (1) Reflective paint will conform to Federal Specifications TT–P–85 and TT–P–1952.

(2) Nonreflective paint will consist of the pigmented binder (paint) covered by Federal Specifications TT–P–85, TT–P–115, and TT–P–1952.

NOTE: Markings may be outlined in black at least 6 inches wide on light-colored pavement.

c. Paint Application. Markings will be painted on paved areas only after the pavements have been allowed to cure thoroughly. The pavement surface must be dry and clean before the paint is applied.

d. Snow–Covered Runway Markers and Markings. Markers and markings will be used to indicate the usable limits of snow-covered runways. Markers will be spaced at intervals of not more than 330 feet and located symmetrically about the axis of the runway along the sides of the usable portion. Sufficient markers will be placed to indicate the runway threshold. Markers must be kept free of snow and rime.

e. Compass–Swinging Base. Compass–swinging bases will be constructed and equipped according to TM 5B823–4; these align an aircraft for the precise calibration of all types of air navigation equipment.

(1) **Alignment markings.** The compass–swinging base pad will be marked with precision alignment indicators that are accurate to within 0.25 percent of 1 degree.

(2) **Clearances.** A minimum distance of 275 feet will be provided from the center of the compass–swinging base pad to the nearest significant quantity of iron and taxiway or engine runup area. The same distance will be allowed from the center of the pad to the nearest parking area or hardstand for aircraft, vehicles, or equipment.

(3) **Marking materials.** Compass–swinging bases will be painted with nonreflective white paint and will conform to Federal Specifications TT–P–85, TT–P–115, and TT–P–1952.

f. Air Navigation Obstruction Marking and Lighting. Obstruction marking and lighting will be limited to those objects that penetrate the clearance planes and surfaces described in TM 5–

823-4 and to those objects that, by their nature and position, constitute a hazard to navigation. Obstruction markings should never be placed on objects that are not, in fact, obstructions.

(1) Color marking and patterns. Obstruction marking will be made with aviation surface orange or a combination of aviation surface orange and aviation surface white. Obstruction marking patterns may be solid orange, alternate bands of orange and white, checkerboard pattern, or beach ball pattern. FAA Advisory Circular 70/7460-1 contains specific instructions on which pattern to use.

(2) Lighting. Obstruction lighting will be according to TM 5-823-4 and FAA Advisory Circular 70/7460-1.

g. Airfield and Heliport Hazards Marking. The criteria described below apply to all Army airfields and heliports. They govern the initial marking and re-marking of hazards to the ground movement of aircraft and service vehicles.

(1) Wheel chocks. Wheel chocks will be marked on all sides with a yellow reflective medium.

(2) Fire hydrants. The barrel of fire hydrants will be painted with nonreflective yellow paint. The tops and nozzles will be painted according to the rated flow of the hydrant. The rated flows and their corresponding colors are as follows:

! Less than 500 gallons per minute—red.

! Between 500 and 1,000 gallons per minute—orange.

! More than 1,000 gallons per minute—green.

(3) Fire extinguishers. All fire extinguisher containers will be red or the color required by local fire prevention standards. Each extinguisher also will be marked with a symbol designating the class of fire for which it is intended. (Class A, B, C, or D fires will be marked as established in National Fire Protection Association (NFPA) Standard 10.) Multiple symbols will be placed on the extinguisher if it is suitable for more than one class of fire. The symbols must conform to the configurations in NFPA Standard 10. Fire extinguishers placed in an area that has aircraft movement will be marked near the top by a 4-inch-wide strip of reflective tape encircling the extinguisher. If a fire extinguisher is stored in a shelter that adjoins areas used by aircraft or aircraft-servicing vehicles, the shelter will be painted with nonreflective red paint and marked with a 4-inch-wide strip of reflective tape along its length.

(4) Marking materials.

(a) Wheel chocks. The reflective material used to mark wheel chocks may be reflective paint that conforms to Federal Specification TT-P-85. Wheel chocks also may be marked with a 4-inch-wide strip of reflective tape that conforms to Federal Specification L-S-300; the color will be silver-white number 1.

(b) Fire hydrants and shelters. The nonreflective paint used to mark fire hydrants and shelters will conform to the requirements in Corps of Engineers Guide Specification CE-250.

The colors will conform to the following identification numbers as given in Federal Standard 595:

! Yellow—13655.

! Red—11105.

! Orange—12197.

! Green—14110.

(c) Fire extinguishers. The background colors in the symbols for classes of fires will conform to the following identification numbers as given in Federal Standard 595:

! Class A, green—14260.

! Class B, red—11105.

! Class C, blue—15102.

! Class D, yellow—13655.

3B3. AIRFIELD MAINTENANCE

a. Grounds. Housekeeping of the grounds around the operations building and parking areas will be accomplished to ensure that foreign object damage (FOD) materials are policed and disposed of properly. The first impression of an airfield is often a lasting impression; therefore, a neat and orderly appearance of the airfield and facilities must be maintained.

b. Fuel Sample Bottles. Fuel in the tanks of an aircraft must be checked before flight operations begin. Taking a preflight sample is the only way to ensure that the fuel on board does not contain water or other visible contaminants. Personnel must clean the fuel sample bottles thoroughly before use to ensure that the sample taken during the preflight inspection is accurate.

NOTE: The procurement of fuel sample bottles and subsequent cleaning will be accomplished per the local SOP. FM 10–67–2, 10–68, and 10–71 describe aircraft refueling.

c. Fire Extinguishers. Fire extinguishers should be checked for broken seals and proper charging. They must be taken annually to the firefighting facility for recharging. Other checks will be conducted according to TB 5–4200–200–10.

d. Aircraft Tiedowns. Aircraft tiedown ropes and anchors will be inspected periodically for serviceability. Besides securing parked aircraft during periods of high ground winds, these anchors ground the aircraft electrically to preclude fire generated from static spark. Anchors and grounding rods will be maintained according to FM 10–68.

e. Runways and Taxiways. A plan should be established for the periodic sweeping of runways, taxiways, and the ramp area. It should include the procedures for mowing grass on the airfield.

f. Snow and Ice.

(1) At installations where snow and ice may constitute a hazard, AR 420-72 requires the establishment of a snow removal and an ice control plan. The plan will include instructions and procedures for—

(a) Establishing priorities for the prompt removal or control of snow, ice, and slush on each movement area.

(b) Positioning snow from movement area surfaces so that aircraft propellers, engine pods, rotors, and wingtips will clear any snowdrift and snowbank as the aircraft's landing gear traverses any full-use portion of the movement area.

(c) Selecting and applying approved materials for snow and ice control to ensure that they adhere to snow and ice sufficiently to minimize engine ingestion.

(d) Beginning snow and ice control operations in a timely manner.

(e) Identifying equipment to be used.

(f) Listing the quantities and storage location of materials; for example, snow fences, chemicals, and abrasives.

(g) Scheduling the training of equipment operators and supervisors.

(h) Scheduling preseason operational trial run sessions.

(i) Ensuring around-the-clock cooperation with weather authorities for notification of forecasts of snow and ice storm intensities and durations.

(2) Calcium chloride, sodium chloride, and abrasives will not be used on airfield or heliport pavements. The chemical (urea) that meets the provisions of Military Specification MIL-U-10866C, Class 2, may be used. The US Air Force (USAF) aircraft deicing fluid that meets the provisions of Military Specification MIL-A-83411 also may be used. These materials do not corrode aircraft.

g. Airfield Inspection.

(1) A quarterly airfield inspection, along with daily spot inspections, ensures quality service and facility maintenance. Inspection checklists should include those items essential to maintaining a well-organized and functional airfield.

(2) The checklists should be expanded or modified to suit the airfield. Checklists should be furnished to the branch chiefs to ensure that they fully understand their duties.

(3) Engineer personnel should inspect the extended runway centerline annually. They will resolve any disparity between the painted runway numbers and the actual magnetic heading of the extended runway centerline.

(4) Air traffic facility managers will annually review and update runway centerline heading information. They also will review any local departure procedures that might be affected by heading changes.

h. Ramp Vehicles and Drivers. The movement of vehicles on runways, taxiways, and parking areas is a daily necessity. Therefore, vehicles must be properly used and marked.

(1) Vehicle movement and markings.

(a) Vehicle movement on the runway should be held to the minimum required for runway inspection and maintenance. All vehicles should be properly marked.

(b) All vehicles authorized to operate on the airfield will be painted yellow according to TM 55–1500–204–25/1. When operational necessity and vehicle design dictate, a vehicle with a rotating beacon system affixed to the top of the vehicle may be authorized by the airfield operations officer to operate on the airfield.

(c) The meaning of ATC light signals should be displayed on the dashboard of vehicles that regularly operate on the airfield.

(d) The operation of vehicles near POL and aircraft refueling areas should be closely supervised. Sparks from the exhaust systems of these vehicles can create a hazardous situation. FM 10–68 describes the use of spark arresters for internal combustion engines.

(e) The maximum speed limit for a vehicle operating on an airfield ramp or near aircraft will not exceed 5 miles per hour (excluding emergency vehicles). The airfield operations officer should establish maximum speed limits, not to exceed 40 miles per hour, for other areas of the airfield.

(2) Driver qualification.

(a) The drivers of vehicles that operate on ramps, taxiways, or runways should have on file evidence of satisfactorily passing a written examination. The examination should include clearance requirements between aircraft and vehicles, light signals, and radio procedures if vehicles are so equipped.

(b) All drivers for the airfield services branch should possess the appropriate military driver's license and special authority to operate on the airfield movement area.

i. Ground Equipment. Equipment other than vehicles is required by the airfield services branch and is authorized on the TDA or TOE. Any vehicle that is required and can be justified usually can be obtained for the airfield. Items that may be needed include the following:

! Snow removal equipment.

! Auxiliary power units.

! Decontamination equipment.

- ! Electrical wands.
- ! Flashlights.
- ! Forklift.
- ! Fuel contamination detector.
- ! Goggles.
- ! Ear protectors.
- ! Magnetic sweeper.
- ! Portable light sets.
- ! Radio equipment.
- ! Runway and taxiway sweeper.

j. Maintenance procedures.

(1) Good preventive maintenance procedures enhance efficient operations. AR 420–22 contains the criteria and responsibilities for initiating and accomplishing preventive maintenance programs.

(2) TM 55–1500–204–25/1 contains standard inspection and maintenance procedures for auxiliary power units, maintenance work stands, portable air compressors, aircraft jacks, and other ground support equipment.

(3) All ground support equipment operating on or around airfields should be marked with reflective tape.

k. Ground Handling. When directing aircraft movements during land operations, aircraft service personnel (guides or marshals) should use the appropriate hand and arm (marshaling) signals in FM 21–60. When available, signal flags may be used with hand and arm signals during daylight hours. Ground guides or marshals should wear hearing and eye protection when guiding fixed- and rotary-wing aircraft.

(1) **Night signaling.** At night, a ground guide will signal with a lighted baton (wand) in each hand. The intensity of these lights will vary, depending on whether the aircrew is aided or unaided. Signals given with wands will be identical to the day signals unless stated otherwise in FM 21–60. Wands should remain lighted at all times. During surface taxiing and parking, the pilot will stop immediately when one or both of the ground guide's wands fail.

(2) **Flagman and ground guide.** When required, a flagman will be stationed so as to be clearly visible to approaching aircraft. This person will direct the pilot to the ground guide. The ground guide will indicate when he is ready to guide the aircraft.

(3) *Ground guide position.*

(a) The position of the ground guide for a fixed–wing aircraft is on a line extending forward of and at an oblique angle from the left (port) wing. The pilot's eyes must be visible to the ground guide from this position.

(b) The position of the ground guide for a rotary–wing aircraft is relatively the same as that for a fixed–wing aircraft. However, the ground guide may be on either side of the aircraft as long as the pilot's eyes are visible to him.

k. *Communications.* To ensure the safety of aircraft and vehicles on the airfield movement area, two–way radio communication is desirable for tower controllers. The SOP should require pilots and vehicle drivers to obtain tower clearance before they proceed onto the aircraft movement area.

Chapter 4

Petroleum, Oils, and Lubricants Services Branch

The petroleum, oils, and lubricants (POL) services branch is responsible for servicing aircraft and for inspecting and general policing of its facilities. The branch also is responsible for operating its assigned vehicles. This chapter discusses the personnel and responsibilities of the POL services branch, aircraft refueling (servicing), and the handling and safety of POL.

4–1. PERSONNEL AND RESPONSIBILITIES

The POL services branch includes a branch chief, shift supervisors, and petroleum storage specialists.

a. *Branch Chief.* The branch chief—

- (1) Coordinates branch activities under the supervision of the operations officer.
- (2) Prepares an SOP that outlines the duties and responsibilities of branch personnel.
- (3) Ensures that personnel are properly trained and qualified to perform their assigned duties.
- (4) Assigns specific personnel responsibilities and ensures that duty rosters and performance records are properly maintained.
- (5) Ensures that POL handlers are checked semiannually for body contamination.
- (6) Inspects POL facilities daily.
- (7) Ensures that adequate supplies of aviation fuels, oils, and lubricants are on hand to meet current and emergency operational requirements.

b. *Shift Supervisors.* Shift supervisors—

- (1) Inspect POL facilities at least once during a shift.
- (2) Supervise and train assigned personnel in their duties.
- (3) Coordinate with other branches concerning VIPs and assigned and transient aircraft refueling requirements.

c. *Petroleum Storage Specialists.* Petroleum storage specialists—

- (1) Provide refueling and other related services for assigned and transient aircraft and ensure that transient aviators complete DD Form 1898 (Avfuels Into–Plane Contract Sales Slip) for credit card purchases.

- (2) Receive, store, and inspect all petroleum products delivered to the storage area.
- (3) Perform operator maintenance on lines, tanks, pumps, and valves in the POL storage area.
- (4) Use the appropriate safety equipment specified in FM 10–68.

4–2. AIRCRAFT REFUELING (SERVICING)

Normally, refuelers (refueler vehicles) are used to refuel aircraft on the flight line. They should be used when it is more practical to take the fuel to the aircraft than to bring the aircraft to the fuel. Only in unusual circumstances would a refueler be used in rapid refueling because of the inherent dangers of such an operation. FM 10–68 discusses the operating procedures to follow in such a case.

a. Driver Training.

(1) The drivers (operators) of refuelers may not have received formal training in the specialized field of aircraft refueling. The commander should establish and maintain an operator training program for these refueler drivers. The drivers should be thoroughly trained in the step-by-step procedures in FM 10–68.

(2) Any accident involving fuel, an aircraft, or a refueler may result in fire. Only drivers who have completed the appropriate training and demonstrated their ability to refuel aircraft properly should be assigned to aircraft refueling operations. Driver qualification on all appropriate vehicles used by the POL services branch should be noted on—

! DA Form 348 (Equipment Operator's Qualification Record (Except Aircraft)) .

! OF 346 (US Government Motor Vehicle Operator's Identification Card).

b. Preoperational Checks. Two types of preoperational checks are performed on refueling vehicles. One type is the preoperational check on the vehicle as a vehicle; for example, checking the inflation of the tires or the coolant level in the radiator. Checks of this type are outlined in the technical manual for the vehicle. The other type of preoperational check is on the refueling portion of the vehicle. FM 10–68 contains information on these checks.

(1) Daily.

(a) The driver of the tank truck will check the condition of the truck's electrical system before operating the truck.

(b) The driver will perform the aqua glow test on the fuel being dispensed. He should maintain a log noting the tank and pump unit from which the fuel was tested and the results of the test.

(2) **Quarterly.** Personnel should check the fueling system of the refueler according to FM 10–68. The maintenance check also should be done immediately when a nozzle strainer or a lab report on a fuel sample indicates contamination or when filter–separator elements are installed.

c. Personnel Refueling Requirements. Three persons should be present during the hot refueling of an aircraft. One person operates the fuel nozzle, the second remains at the emergency fuel shutoff valve, and the third mans a suitable fire extinguisher. The third person stands outside the main rotor disk of the aircraft at a point where he can see both the pilot at the controls and the refueler with the nozzle. This person may be from the forward arming and refueling point (FARP) or one of the aircraft crewmembers. In a combat situation, mission, enemy, terrain, troops, and time available (METT-T) may override the availability of a third person to man the fire extinguisher. Refueling personnel will not have matches, lighters, or other materials in their possession that could produce a spark.

4-3. POL HANDLING AND SAFETY

The handling of petroleum products presents many hazards. However, both bulk and packaged products can be safely handled if personnel understand their characteristics and take precautions. During the receipt, storage, or issue of flammable and combustible petroleum products, personnel must know and observe safety precautions. Table 4-1 shows the safety rules for transferring and storing POL.

Table 4-1. Safety rules for transferring and storing POL

RULES	REMARKS
Bond and ground equipment.	For all petroleum operations, always bond and ground equipment.
Avoid overhead filling.	If you cannot avoid overhead filling, put the end of the filling line inside the tank so that the fuel will be disturbed as little as possible.
Use walkways.	Always use walkways to cross tank firewalls.
Ventilate and clean vehicles and containers.	Collapsible tanks, railway tank cars, and tank vehicles must be cleaned and ventilated as prescribed in FM 10-20.
Observe safety rules when fueling aircraft.	Observe all safety precautions in FM 10-68.
Observe safety rules when loading or transferring POL products.	Observe all safety precautions in FM 10-71.

Chapter 5

Aviation Unit Operations

The specific task organization of an aviation unit depends on several factors. They include the unit's primary mission and whether the unit deploys away from its support base. Operations are the nerve center of an aviation unit. Operations personnel coordinate activities and work directly with adjacent and higher level staff sections. Aviation unit operations control unit missions, daily operations, flight operations, and training. Unit operations are organized with either a flight operations section or an aviation battalion operations section. This chapter discusses both types of organizations in terms of assigned tasks and responsibilities. Section I discusses garrison operations. Section II contains guidance that can assist the commander in the development of training strategies and unit tactical training procedures.

SECTION I. GARRISON OPERATIONS

5–1. PERSONNEL AND RESPONSIBILITIES

a. Operations Officer or S3.

(1) The aviation unit commander should choose an experienced, mature, and responsible officer as the operations officer. Preferably, the individual designated should have served as a platoon leader or company commander in a similar unit. He should be familiar with the type of missions flown, the equipment, the personnel, and unit operations.

(2) The operations officer is the commander's principal staff officer for operations, plans, organization, and training. The scope of the operations officer's responsibilities influences or is influenced by other staff functions. Thus, a high degree of coordination with other staff members is essential.

(3) The operations officer briefs the commander on the status of the unit. The briefings should include mission readiness, training status, problem areas, and upcoming missions and taskings that will affect the readiness of the unit in any critical area. The operations officer relies on his staff to provide information for the briefings. The briefings must be timely, complete, and accurate so that appropriate decisions can be made. The commander gives guidance to his staff on his plans and expectations.

(4) The operations officer or S–3 ensures risk management is applied to all unit operations.

b. S3 Air–Airspace Management Element (AME). The airspace management function at brigade or battalion level is the staff responsibility of the S3. The S3 Air who ensures that the commander's airspace management requirements are met supervises the AME. FM 1–120 and FM 100–103 discuss the airspace management function in detail.

c. Flight Operations Officer. In a unit with a flight operations section, the flight operations officer coordinates unit flying requirements and briefs the unit commander on the status of flight missions. He also briefs the commander on the status of the unit's flying capability based on aircraft

availability and on information in flying–hour reports and crew status reports. The flight operations officer is assisted in this function by flight operations personnel who obtain data, compile reports, maintain records, and provide the physical support necessary to accomplish the mission.

(1) The duties of the flight operations officer include—

- (a)** Supervise and monitor the unit's flying–hour program.
- (b)** Accept, process, coordinate, and assign flight missions.
- (c)** Monitor flight requirements for the unit's aircrew training program.
- (d)** Supervise and maintain aircrew proficiency and qualification records.
- (e)** Assist in monitoring the unit's crew endurance program.
- (f)** Identify hazards to aviation missions, assess their risks, and develop control options for command decision making.

(2) The flight operations officer has supervisory responsibility for coordinating unit requirements when the unit is deployed away from a flight planning facility or an airfield. This includes coordinating the use of other available facilities in the area in which the unit is deployed. Some duties that should be considered are as follows:

- (a)** Maintain a unit hazard map.
- (b)** Prepare a preaccident plan and coordinate unit crash and rescue operations.
- (c)** Maintain an aircraft status board and publications file.
- (d)** Establish flight–following and air traffic procedures when the unit is in an area without an ATC facility.
- (e)** Establish procedures for logging flights by using either flight plans or tactical flight logs.
- (f)** Establish procedures for obtaining weather information and notices to airmen (NOTAMs).
- (g)** Implement aviation risk controls into operation plans and orders.

d. Assistant Operations Officer. In an aviation battalion, the assistant operations officer—

- (a)** Performs the duties of the flight operations officer.
- (b)** Briefs the operations officer on the status of flight missions and the unit's flying capability.

e. Chemical Officer (CHEMO). A CHEMO—when available—will coordinate nuclear, biological, chemical (NBC) reporting, protection, and training for the aviation unit. He may be assisted by an NBC NCO—usually a staff sergeant—for battalion-level operations. The NBC NCO—

- (a) Provides NBC unit training.
- (b) Prepares reports.
- (c) Maintains equipment.
- (d) Assists in the setup of decontamination stations.

f. Aviation Operations Noncommissioned Officer in Charge (NCOIC).

(1) The operations NCOIC obtains training information, coordinates taskings and training, supervises operations enlisted personnel, and compiles reports. He briefs the operations officer and the unit command sergeant major on the status of the unit's enlisted personnel. This briefing is similar to that given to the commander about the overall status of the unit.

(2) The operations NCOIC may have a training NCO to assist in obtaining training data and scheduling training events. The operations NCO also may schedule and oversee range operations and request ammunition.

g. Flight Operations Sergeant. In a unit with a flight operations section, the flight operations sergeant is concerned with the technical aspects of flight operations. He also acts as the operations platoon sergeant. The duties of the flight operations sergeant are to—

- (1) Assist the flight operations officer.
- (2) Coordinate mission requirements.
- (3) Requisition flight information publications.
- (4) Develop and publish the duty roster for operations personnel.
- (5) Assist aircrews in processing flight plans and manifests.
- (6) Ensure the availability of current flight and weather information.
- (7) Supervise the maintenance of individual flight logs and records and operations maps and charts.
- (8) Ensure that personnel observe OPSEC procedures when using communications equipment.
- (9) Supervise the work of subordinates in installing, operating, and/or maintaining platoon and/or section vehicles and equipment.
- (10) Ensure that the support provided is timely.

- (11) Gather data and entering it on flying-hour reports.

h. Aviation Operations Specialists. The operations NCOIC or the flight operations sergeant supervises the operations of the aviation operations specialist. The duties of the aviation operations specialist are to—

- (1) Update the NOTAM board.
- (2) Interpret and process flight plans.
- (3) Maintain individual flight record folders.
- (4) Maintain the unit's crew endurance files.
- (5) Post current flight and weather information.
- (6) Maintain the aircrew and aircraft status boards.
- (7) Maintain functional files and typing correspondence pertaining to operations.
- (8) Maintain and operate assigned vehicles and equipment.
- (9) Initiate search and rescue procedures for overdue aircraft.
- (10) Post changes to the aircrew reading file.
- (11) Issue receive and inventory items as required by the unit SOP.

i. Communications Chief.

(1) The communications chief works closely with the operations section to establish and maintain fixed and mobile communications.

(2) The establishment of communications is vital to mission success. The communications chief must ensure that an adequate number of personnel are trained in the use and care of communications equipment. He also must ensure that the equipment is available and in good condition and that the operations officer is briefed on the status of training and equipment. The communications chief may be responsible for coordinating radio frequency use and some portions of communications security and for establishing radio networks or wire communication.

5B2. MISSION SCHEDULING

a. Mission Assignment. The aviation company normally receives the unit's missions from the battalion S3. Missions are assigned to unit elements based on mission requirements and the unit SOP.

b. Premission Planning. Initial contact is made with the supported unit, and details about the mission are obtained; for example, point of contact (POC), radio frequencies, and pickup points.

The unit commander, platoon leader, or authorized briefing officer—

(1) Analyzes missions to identify hazards, assess their risk, and develop control options to reduce risk to the lowest acceptable levels.

(2) Conducts a preliminary premission briefing for each crew according to AR 95-1.

(3) Explains the procedures for aborted missions.

(4) Keeps operations informed of mission progress.

(5) Informs crews of information received during initial contact with supported units.

(6) Conducts a crew debriefing upon mission completion.

(7) Submits an afteraction report—including any OPSEC violations—to operations.

c. Mission Completion. Upon mission completion, the aircrews complete afteraction reports and the platoon leader gives the reports to operations. The aircrews must fill out the postmission debrief on DA Form 5484-R (Mission Schedule/Brief) according to AR 95-1.

5-3. DISPATCH FACILITIES

Unit operations should have a flight dispatch capability to control flights in the local area and to supply necessary flight planning for unit aircrews.

a. A flight following log may be used for the flight following of visual flight rules (VFR) aircraft that remain in the local area. If the flight log is used in lieu of a flight plan, it must include at a minimum the following:

(1) Aircraft designation and call sign.

(2) Route of flight.

(3) Point and time of departure.

(4) Estimated time en route.

(5) Actual time of arrival.

(6) Location of passenger and crew manifest if it is not attached to the flight log.

b. If the flight does not meet the criteria of a local flight under VFR conditions, the aviator must file a flight plan with the unit or airfield operations. The operations will forward the flight plan in accordance with AR 95-11 and FAA Handbook 7110.10. (Chapter 2 describes flight movement messages.)

c. Unit operations will establish a means of obtaining weather and NOTAM information for aircrews on local flights when the unit operations is not collocated with the airfield weather station

or the flight planning room. This information may be obtained by telephone or by radio. If neither method is available, the information may have to be picked up in person. (Chapter 2 discusses weather briefings and flight planning facilities.)

d. During nonduty hours, aircrews can obtain weather information by telephoning the Federal Aviation Administration (FAA) weather station or the nearest weather briefing facility identified in the Department of Defense (DOD) Flight Information Publication (FLIP). They can obtain NOTAM information from the nearest flight briefing facility. The telephone numbers for these facilities should be prominently displayed by the telephone designated for the use of aircrews.

5–4. FLIGHT PLANNING AREA

a. The flight planning area of the unit operations should be set up similar to the flight planning area of the airfield operations. (Chapter 2 discusses airfield flight planning.) The following items should be available:

- (1)** An E6B computer and flight plotters.
- (2)** Accurate clocks depicting local time and Coordinated Universal Time (UTC).
- (3)** A flight planning table with a surface large enough to lay out navigational charts.
- (4)** A telephone so that aircrews can contact the airfield weather station or the FAA flight service station.
- (5)** Message boxes in which information for aircrews can be left and picked up by aircrews at their convenience.
- (6)** An aircrew bulletin board displaying current flight and safety information.
- (7)** Relevant Army regulations, FAA Regulations, and flight information publications; the aircrew information reading file; the unit SOP; and any other pertinent publications.
- (8)** A wall display of the local area depicted on an aeronautical chart. (The chart should depict special VFR corridors, local training areas, nap-of-the-earth (NOE) training areas, range information, and an updated map showing all hazards to flight operations.)

b. The flight planning area can be as well equipped as the operation requires, but it should be as mobile as possible. When the unit deploys to the field, it should take most of the flight planning equipment.

5B5. AIRCREW TRAINING

The commander is responsible for conducting the aircrew training program according to TC 1–210. He normally assigns the platoon leaders, instructor pilots, and standardization officer the responsibility for conducting the training. Aircrew training records are maintained by the units and are monitored by the standardization officer.

5-6. OPERATIONS TRAINING AND EVALUATION

Aviation operations specialists should be evaluated when they arrive in the unit. This evaluation will determine their ability to perform all tasks in Soldier Training Publication (STP) 1-93P24-Soldier's Manual (SM)-Trainer's Guide (TG) and STP 1-93P1BSM for the appropriate individual skill level. Tasks that cannot be adequately performed should be incorporated into an individual, formalized on-the-job training program. Each unit should develop programs to comply with STPs 1-93P24-SM-TG, 1-93P1-SM, 21-1-Soldier's Manual of Common Tasks (SMCT), and 21-24-SMCT.

5-7. AIRCRAFT SERVICING

Unit operations should furnish a copy of the daily flight schedule to the petroleum, oil, and lubricants (POL) section. Aircraft refueling will be accomplished according to this schedule. Transient aircraft requiring fuel will request it through the unit operations or directly from the POL section. Operations will coordinate any other type of aircraft or aircrew service required. This may include but is not limited to transient parking or billeting, VIP services, emergency maintenance, or information support and communications.

SECTION II. TACTICAL OPERATIONS

5-8. TRAINING

Training is essential to the successful accomplishment of any mission. The operations officer and sergeant are responsible for ensuring that assigned operations personnel are adequately trained and competent in all aspects of unit operations in a tactical environment. This training includes but is not limited to the types described below.

a. Cross-Training. Each individual should be cross-trained in the various functions of tactical operations. This will help ensure mission accomplishment in case of personnel shortages.

b. Field Operations Training. Unit personnel must be trained in designated duties and responsibilities. The training should be conducted before the unit deploys for training exercises or combat operations.

c. Army Airspace Command and Control (A²C²) Training. Selected flight operations personnel should be trained in A²C² procedures. Training will be according to FM 1-120 and FM 100-103.

d. Driver Training. At a minimum, drivers and assistant drivers should be trained and licensed in the type of vehicles that they will drive. They also should be trained in—

- (1) Safety and management of risk.
- (2) Load plans.
- (3) Vehicle preventive maintenance checks and services (PMCS).

- (4) Radio procedures.
- (5) Convoy operations.
- (6) Ambush procedures.
- (7) Vehicle emplacement.
- (8) Cover and concealment.
- (9) Blackout driving procedures.
- (10) Night vision device (NVD) driving and emergency recovery procedures.
- (11) NBC detection and decontamination procedures.
- (12) Vehicle recovery operations and emergency repairs.

e. *Guard and Gunner Training.* Guards and gunners should be trained in—

- (1) Range cards.
- (2) Fighting positions.
- (3) Perimeters of fire.
- (4) Air guard procedures.
- (5) Cover and concealment.
- (6) Perimeter guard and tactical operations center (TOC) security.
- (7) Challenge and password procedures.
- (8) Enemy prisoner of war procedures.

f. *Radio and Switchboard Training.* Radio and switchboard operators should be trained in—

- (1) Meaconing, intrusion, jamming, and interference (MIJI) procedures.
- (2) Radio net procedures.
- (3) Antenna setup and siting.
- (4) Radio and equipment preventive maintenance checks and services (PMCS).
- (5) Signal operation instructions and secure equipment usage.

(6) Switchboard setup and operation (in the absence of communication personnel).

g. Generator Training and Licensing. After training and licensing, generator operators should be familiar with—

(1) Generator PMCS.

(2) Safety procedures.

(3) Generator operations.

(4) Setup and siting procedures.

5-9. TACTICAL PLANNING

Before the unit conducts operations in a tactical environment, the operations sergeant should develop an operations plan based on the unit's mission essential task list (METL) and the tactical standing operating procedure (SOP). The plan should include vehicle load plans and an assessment of the training strengths and weaknesses, and an assessment of the risk of tactical operating procedures and/or common task training. It also should designate the tactical and/or additional duties for—

a. Shift supervisors.

b. Guards and gunners.

c. Jump TOC personnel.

d. Generator operators.

e. Drivers and assistant drivers.

f. Radio and switchboard operators.

5-10. ALERT NOTIFICATION

Upon receipt of an alert notification, the operations NCOIC ensures that all personnel are performing their duties according to established procedures. This includes submitting readiness reports and maintaining communications with higher headquarters.

5-11. DUTIES AND RESPONSIBILITIES

a. Operations Sergeant. The operations sergeant is responsible for training assigned personnel. His duties also are to—

(1) Monitor TOC security.

(2) Schedule the work flow.

- (3) Ensure that overlays are reproduced.
- (4) Ensure that reports are complete and timely.
- (5) Ensure that missions are reviewed and processed.
- (6) Ensure that missions comply with airspace control measures.
- (7) Ensure proper equipment operation and maintenance.
- (8) Establish and monitor search and rescue (SAR) procedures.
- (9) Establish and monitor flight–following activities.
- (10) Monitor and supervise normal administrative flight operations functions.
- (11) Establish a preaccident plan and monitor combat search and rescue (CSAR), medical evacuation (MEDEVAC), crash rescue, and downed aircraft procedures.
- (12) Designate personnel for miscellaneous support; for example, water, fuel, meals, trash collection, and courier.

b. *Shift Supervisors.* Shift supervisors are responsible for the training and conduct of personnel assigned to their shift. Their duties include—

- (1) Maintain DA Form 1594 (Daily Staff Journal or Duty Officers Log).
- (2) Coordinate flight–following activities.
- (3) Coordinate SAR procedures.
- (4) Maintain noise, light, and litter discipline.
- (5) Ensure that the TOC is in a high state of police.
- (6) Ensure that proper radio operating procedures are used.
- (7) Ensure that flight records are properly maintained.
- (8) Maintain control of the TOC environment by limiting personnel access.
- (9) Ensure that situation and operations maps are posted and updated in a timely manner.

c. *Aviation Operations Specialists.* Aviation operations specialists will—

- (1) Maintain flight records.
- (2) Conduct flight–following activities.

- (3) Make entries in DA Form 1594 as directed.
- (4) Assist with SAR procedures.
- (5) Maintain the TOC in a high state of police.
- (6) Maintain noise, light, and litter discipline.
- (7) Update situation and operations maps in a timely manner.
- (8) Assist with normal administrative flight operations functions.
- (9) Use proper radio operating procedures when transmitting radio messages.

5-12. RECORDS AND REPORTS

a. Appropriate records, reports, and other documentation are maintained during training exercises and combat operations per the unit SOP. The accuracy and validity of these records and reports are vital because they may be used to record unit activities during armed conflict. Records and reports are usually separated into two categories: those required to establish policy or permanent records and those required daily for current operations. The required reports (and records) include but are not limited to those listed below on—

- (1) NBC.
- (2) Spot.
- (3) MIJI.
- (4) Weather.
- (5) Closing.
- (6) Stand-to.
- (7) Casualty.
- (8) Mission debriefings.
- (9) Fuel status.
- (10) Combat loss.
- (11) Vehicle status.
- (12) Aircraft status.
- (13) Personnel status.

- (14) Logistics status.
- (15) Ammunition status.
- (16) Aircraft accident.
- (17) Section sensitive item.
- (18) Prisoner of war status.
- (19) Unit forward arming and refueling point (FARP) location and status.

(20) Downed aircraft. (For MEDEVAC, SAR, or CSAR, units reporting downed aircraft should verify the grid coordinates before they notify higher headquarters, the rescue coordination center (RCC), and/or the joint rescue coordination center (JRCC).)

b. Operations personnel maintain a daily staff journal on DA Form 1594 according to FM 101–5. Radio and wire conversations, spot reports, liaison officer reports, OPSEC violations, and significant activities reports are recorded in this journal.

5–13. TACTICAL OPERATIONS CENTER

Many considerations are involved in setting up, operating, and tearing down a TOC. The operations sergeant supervises the enlisted personnel in this operation. The layout of the TOC is determined by the mission, environment, and the unit SOP.

a. Setup and Teardown Considerations.

(1) Setup considerations.

- (a) Maintaining communications during the setup procedure.
- (b) Locating a suitable area with adequate drainage.
- (c) Performing perimeter security .
- (d) TOC setup.
- (e) Antennas (set up and connections)
- (f) Setting up the work area.
- (g) Power for radios in the work area(s) (external).
- (h) Emplacement of vehicles that are not being actively used.
- (i) Camouflage and concealment.
- (j) Performance of other duties according to the unit tactical SOP.

(2) *Teardown considerations.*

- (a)** Camouflage removal.
- (b)** Communications transfer to alternate location.
- (c)** Removal of external generator power from emplaced vehicles.
- (d)** Disassembly of work area, security perimeter, and guard posts.
- (e)** Vehicle load plan(s).
- (f)** Area police.
- (g)** Preparation for convoy.
- (h)** Closing report(s).
- (i)** Performing other duties per the unit tactical SOP.

b. *Operational Requirements.*

- (1)** Upon arrival at the TOC site, the supervisor—
 - (a)** Establishes communications with the next higher (tasking) headquarters.
 - (b)** Directs emplacement of the TOC.
 - (c)** Directs the setup of the TOC.
 - (d)** Submits a closing report.
 - (e)** Monitors safety procedures.
 - (f)** Establishes a crew endurance program.
 - (g)** Establishes and assigns crews and shifts.
 - (h)** Directs security and perimeter defense for the TOC.
 - (i)** Directs the establishment of communications with supported and/or supporting units.
- (2)** During normal operations, the supervisor—
 - (a)** Monitors ongoing field training.
 - (b)** Conducts afteraction reviews as required.

- (c) Coordinates with the S3 about operational requirements.
 - (d) Monitors the duty performance of shift personnel.
 - (e) Coordinates with the first sergeant for section support.
 - (f) Coordinates with the battalion or brigade S3 for A²C² measures as necessary.
 - (g) Obtains shift intelligence briefings and briefs subordinates on a need-to-know basis.
- (3) Recovery operations are as important as setup operations. During recovery operations, the supervisor—
- (a) Ensures that drivers are rested before departure.
 - (b) Ensures that all starting, reporting, and closing points are met on time.
 - (c) Inventories all equipment for accountability, serviceability, and cleanliness.
 - (d) Reports all field shortages, losses, or damage to the appropriate sections.
 - (e) Ensures that sensitive items are accounted for and turned in and that a closing report is submitted to higher headquarters.
- (4) Once TOC operations are established and functioning properly, the operations sergeant—
- (a) Monitors unit movement orders.
 - (b) Updates unit mission requirements.
 - (c) Assists in selecting landing areas.
 - (d) Monitors MOP level alert warnings.
 - (e) Monitors the status of predesignated dispersal areas.
 - (f) Ensures that equipment is accounted for and properly maintained.
 - (g) Ensures that operations are conducted according to the unit tactical SOP.
 - (h) Assists in determining the locations of FARPs, the number of usable points, and the status of the FARPs.
 - (i) Assists in the development of operation orders, warning orders, fragmentary orders, and operation plans.

c. Movement Preparation Phases. The operations sergeant or the shift supervisor should periodically check all phases of the preparation for movement. This is accomplished by

inspecting vehicle load plans, weapons, mission-oriented protective posture (MOPP) gear, and personal equipment (TA50) for maintenance and accountability.

d. Communications. Successful employment of the TOC within an aviation unit depends on the capability of TOC personnel to communicate with all echelons. The communications section establishes the communications network. Specifically, the section is responsible for operating the installation switchboard and maintaining the internal and external communications system.

(1) Units can use a variety of methods to communicate on the battlefield. The most widely used method is frequency modulated (FM)–secure. Successful operations within any communications network depend on reliability, flexibility, and security.

(a) Reliability. The reliability of the system depends on several factors. They include well-trained and proficient personnel, properly maintained equipment, and an alternate plan for backup communications. High system reliability depends on training, PMCS, and planning.

(b) Flexibility. Flexibility and reliability are closely related. A flexible system provides more than one means or route to transmit a message. For example, weather reports between major headquarters can be relayed by radio teletypewriters, multichannel networks, or messenger.

(c) Security. Security for a communication system is essential and can directly affect the outcome of any combat operation. Personnel, special equipment, operating procedures, and equipment emplacement or employment all affect the security of a communication system.

(2) The communications chief should inventory all communications equipment and check it for serviceability before the unit deploys. He should then assist the operations officer and/or the NCOIC in conducting a map and site reconnaissance to select the most advantageous location for the communications equipment. The communications chief advises the unit commander on proposed communication system plans and deployment procedures. The commander approves the selected site and deployment procedures and ensures that the plan is carried out.

(3) The communications chief should supervise the loading of all communications equipment onto unit vehicles as outlined in the unit load plan.

(4) Operations personnel should use landline communications to coordinate and clear tactical flights with the air traffic services element (when available) before the aircraft depart. They also should use landline communications when they communicate with unit elements on the internal wire network. When landline communications are not feasible, personnel should use FM–secure radio channels. Personnel must avoid discussing classified information on any landline system. FM 11–50 describes the specific types of aviation company communications.

5–14. JUMP TOC OPERATIONS

The jump TOC is the forward-deployed element of the main TOC and is the operational command post during movement of the main TOC. It is sometimes referred to as the tactical command post. Jump TOC personnel should be trained in all aspects of TOC operations. Because of mission requirements, the jump TOC should be manned by personnel who require the least amount of supervision; that is, they should be self-sustaining and highly motivated. The unit SOP should outline operating procedures for the jump TOC.

5–15. OPERATIONS AND SITUATION MAPS

a. Aviation operations specialists and NCOs are responsible for preparing the unit situation map. They obtain information for preparing the map from combat operation plans or from the S2/S3 or G2/G3. The unit situation map usually has several overlays. The map is a graphic representation of known or suspected enemy and/or friendly locations and activities; it depicts the current tactical, administrative, and logistical situations. FM 101–5–1 specifies the information that will be placed on the map and overlays. Updating the map and its associated overlays requires the joint efforts of all unit operations personnel. Aerospace information may be obtained from the division or corps A²C², the aerospace control order (ACO), and/or the air tasking order (ATO). FM 100–103 requires that this information be posted to the aerospace overlay to ensure that air traffic does not conflict during aviation operations.

b. Tactical situation maps are used to keep unit commanders informed of developments on the constantly changing battlefield. This information helps the commander determine how best to employ aviation assets in a threat environment. Aviation operations personnel maintain the unit's situation map for both mission and command briefings. The S3 ensures that situation maps and overlays are properly maintained. The information posted must be accurate, current, and legible.

5–16. AIRCREW MISSIONS

The S3 or assistant S3 receives a warning order before receiving the mission. He then determines the required course of action.

a. To ensure a thorough understanding of assigned missions, briefing officers will use DA Form 5484–R (Mission/Schedule Brief), FEB 96, or the electronically generated revision DA Form 5484–R–E for briefing and postmission debriefing. The electronically generated DA Form 5484–R–E must contain all data elements of the printed DA Form 5484–R. (Instructions for completing the DA Form 5484–R are included in Appendix H.)

b. The DA Form 5484–R, FEB 96, and DA Form 5484–R–E, FEB 96, will be maintained in the unit files for at least 30 days.

c. A general debriefing may be given daily to all aircrews to provide pertinent information about tactical operations for the next 24 hours. This briefing reduces the amount of information that must be presented at the preflight briefing.

d. The aviation safety officer should be involved in all phases of tactical operations and training. He is an active participant from preexercise planning to afteraction reports. His primary duty is advising the commander and staff on the management of risk.

5–17. COMBAT SEARCH AND RESCUE OPERATIONS

Army aviation units conduct combat search and rescue (CSAR) operations. Aviation commanders plan for CSAR for all of their combat missions. In addition, Army aviation can expect to take part in Joint CSAR operations. FM 90–18, FM 1–100, FM 1–111, and FM 1–113 discuss CSAR operations. Appendix C contains information on conducting SAR operations in peacetime. Appendix C contains information on conducting SAR operations in peacetime.

Chapter 6

Safety

Commanders and other unit leaders are responsible for managing risk involved in all unit operations. The unit safety officer/NCO must assist the commander and staff by developing and implementing an integrated, imaginative, and comprehensive accident prevention program within the scope of the unit's TOE or TDA mission. The risk management process will be used when developing unit operation plans. Plans will ensure the identification of hazards and the implementation of appropriate control measures. Chapter 6 discusses aircraft accident prevention. It describes a pre-accident plan and contingency plans. It outlines the requirements for an aircraft accident investigation. It describes the operational hazard report (OHR), which contains information on how to prevent accidents. It lists several safety regulations and procedures for handling hazardous material. Finally, it discusses aircraft firefighting and crash and rescue services.

6-1. AIRCRAFT ACCIDENT PREVENTION

Accident prevention involves identifying and controlling risks in aviation operations.

a. Accident prevention is a command responsibility. Commanders must ensure that the safety program involves all personnel and activities of the organization. Commanders must establish whatever requirements that may be necessary to ensure the safety of personnel and equipment under their control.

b. Major Army command (MACOM), corps, division, aviation brigades, aviation battalions, and companies will have a TOE- or TDA-authorized, full-time position for a qualified aviation safety officer (ASO). This person will assist in administering the aviation accident prevention program. A safety-trained NCO will be appointed to assist the ASO at brigade level and below. These appointments will be made according to AR 385-95.

c. Commanders will establish a formal process to identify, assess, and control risks in aviation operations. Management of risk is an operations function of a unit.

6-2. PRE-ACCIDENT PLAN

A pre-accident plan lists actions to be taken if an accident occurs. A good plan will include care for injured personnel, security of the accident scene, and procedures for safe airfield operations during a crash rescue/recovery operation. A pre-accident plan will be developed and maintained for each operational Army airfield, heliport, and aviation activity. The aviation safety officer is responsible for rehearsing and reviewing the unit pre-accident plan with the operations officer (minimum quarterly). The airfield operations officer is responsible for preparing, disseminating, and testing the pre-accident plan. (Appendix C discusses emergency plans and overdue aircraft procedures.)

6B3. CONTINGENCY PLANS

a. *Emergency Plans.* The emergency plans should provide enough guidance to ensure the immediate issue of vital information to personnel who have responsibilities during an emergency. (Appendix C discusses emergency plans in detail.)

b. *Hurricane and High Wind Plan.* During a hurricane evacuation, Army commanders of airfields and flight activities will—at their discretion—evacuate assigned aircraft and impose temporary restrictions on the use of flight facilities under their control. A detailed plan should be outlined in the local SOP and implemented when a hurricane or high wind warning is received. The plan should include but not be limited to—

- ! The evacuation, storage, or tiedown of aircraft. (The tiedown instructions in the aircraft operator's manual must be followed.)
- ! The removal of loose objects from parking areas; for example, chocks, fire extinguisher, boarding ramps, toolboxes, foreign object damage (FOD) containers, and work platforms.
- ! The protection of window glass and interiors by using prefabricated window covers. (To allow for pressure equalization, the building should not be made airtight.)
- ! The conduct of checks on backup power sources to ensure efficient operation and availability of required fuel and oil.

c. *Disaster Relief Operations.* AR 500–60 authorizes disaster relief operations. According to AR 95–1, Army aircraft will be used for official purposes only. Determination of whether a use is official is a command decision. MACOMs are responsible for formulating disaster plans for their areas. Operations officers should know how airfields interface with those plans.

6–4. AIRCRAFT ACCIDENT INVESTIGATION

a. A successful aircraft accident investigation requires proper planning and organization, a vital part of which is the pre–accident plan. Well–laid plans before the accident occurs ensures that personnel and equipment are effectively used. On the other hand, if a good plan is not in place, the accident scene can quickly become one of complete confusion. DA Pamphlet 385–40 is the reference for the conduct of an aircraft accident investigation.

b. Commanders ensure that all Army accidents that result in injury, occupational illness, or property damage are investigated, analyzed, reported, and recorded according to AR 385–40.

6–5. OPERATIONAL HAZARD REPORT

An operational hazard is any condition or act that affects or may affect the safety of Army aircraft or associated personnel and equipment. AR 385–95 contains information on preventing accidents caused by operational hazards.

a. Operational hazards include inadequacies, deficiencies, or unsafe practices in—

- ! Air traffic control (ATC).
- ! Airways and navigational aids (NAVAIDs).
- ! Controller procedures and techniques.
- ! Near midair collisions (NMACs) between aircraft or near collisions between aircraft and other objects in the air or on the ground.
- ! Aircraft operations.
- ! Aircraft maintenance or inspection.
- ! Weather services.
- ! Airfields and heliports, facilities, or services.
- ! Flight or maintenance training and education.
- ! Regulations, directives, and publications issued by DOD agencies, the Federal Aviation Administration (FAA), the International Civil Aviation Organization (ICAO), and host nations.

b. An OHR is not submitted when corrective action has already been taken. Also, it is not submitted on material failure of aircraft components and ground support equipment. See DA Pam 738-751 for these occurrences.

c. Commanders will establish procedures for reporting operational hazards and ensure that all such reports are investigated and that hazardous conditions are corrected. All commands will use DA Form 2696-R (Operational Hazard Report) for reporting operational hazards.

d. An OHR will be submitted to the ASO or Army flight operations office at the unit or the installation where the hazard was observed. If this is not possible, either the home airfield or the next airfield at which the reporting individual lands should receive the report. The ASO will immediately forward the OHR to the installation concerned. The ASO will thoroughly investigate the report and submit recommendations to the commander. When corrective action cannot be taken at unit level, the report will be forwarded through channels to the command level at which appropriate corrective action can be taken.

e. The commander will ensure that procedures are established to manage the OHR system. This includes signing and returning completed OHR to the ASO within 10 working days of the date the report was received. The completed action will be returned to the originator within 20 working days from the date the report was received.

f. Any reports that have worldwide application will be forwarded to Commander, US Army Safety Center, Fort Rucker, AL 36362-5363. Information copies of all OHRs not correctable at or below MACOM level and reports that indicate the possible involvement or deficiency of FAA

personnel or facilities also should be forwarded to the US Army Safety Center. Copies of OHRs about Army ATC procedures will be forwarded to Commander, US Army Aviation Center, ATTN: ATZQ–ATCBMO, Fort Rucker, AL 36362–5265.

6–6. HAZARDOUS MATERIAL

Hazardous material is defined as any material that is flammable, corrosive, explosive, toxic, radioactive, nuclear, unduly magnetic, or biologically infective or that acts as an oxidizing agent. It also includes any other material that may endanger human life or property because of its quantity, properties, or packaging.

a. *Transport.* Flight operations personnel must comply with special procedures governing the transport of hazardous materials by aircraft. AR 95–27 outlines the operational procedures for aircraft transporting hazardous materials. AR 200–1 and AR 420–90, FM 55–9, and TM 38–250 contain additional information on the transport of hazardous materials.

b. *Safety Regulations.*

(1) When necessary, the supported unit briefs the air crew in charge of transporting the cargo on the special handling requirements before takeoff.

(2) When an aircraft loaded with ammunition or fuel as cargo takes off or lands at an airport, the pilot notifies the ATC facility of that airport about the—

! Quantity and type of load.

! Classification of the load.

NOTE: If the contents of the aircraft are classified, the pilot informs the ATC tower that he is unable to divulge the aircraft's contents because of their sensitive nature. The procedures for handling these aircraft are the same as for any other aircraft carrying hazardous material.

6–7. AIRCRAFT FIREFIGHTING AND CRASH AND RESCUE SERVICES

a. Aircraft firefighting and rescue services may be provided by the installation engineers. Personnel and equipment also may be assigned under the supervision of the airfield operations division. In either case, these critical functions must be closely coordinated with the branches of the operations division. AR 420–90 establishes basic procedures and responsibilities for crash and rescue operations at airfields under DA jurisdiction. Primarily, these procedures apply to airfields that have a sustained daily average of 40 or more flight activities (takeoffs and landings). To the extent possible, they also apply to airfields with less than 40 daily flight activities and to other airfields with authorized rescue and firefighting facilities.

b. The installation commander having jurisdiction over an airfield is responsible for maintaining an effective organization of trained personnel and adequate and reliable equipment. The commander ensures that the airfield provides emergency protective services for flight activities and the types of aircraft operating at that airfield. These services include publishing detailed emergency firefighting and rescue procedures and procedures that govern hazardous cargo and defueling operations as outlined in AR 420–90. These procedures should be posted at each location

where emergency calls are received; each person must be familiar with them. (Appendix C contains information on emergency plans and personnel responsibilities.)

Chapter 7

Flight Records

The management of flight records is a major function of aviation unit operations. The records must be maintained properly. They become permanent DA records for statistical and historical data for all rated and nonrated personnel. Rated and nonrated personnel also may use the records as proof of their flight experience.

7–1. GENERAL

The DA Form 759–series forms used to maintain flight records provide the unit commander means to track total hours and monitor Aircrew Training Program (ATP) compliance. The Automated Flight Record System (AFRS) is designed to assist flight operations personnel in efficiently managing unit records. Use of the current approved version AFRS is mandatory for all active Army, US Army Reserve (USAR), and Army National Guard (ARNG) aviation units. Flight records will be maintained manually only if the situation dictates (unit deployment, lack of a computer, etc.). Efforts to correct equipment deficiencies will be immediately undertaken to return flight records maintenance to the AFRS system as soon as possible.

7–2. FORMS AND RECORDS

a. Commanders will maintain the individual flight records for all assigned and attached—

- ! Aviators in operational aviation positions.
- ! Aviators in nonoperational aviation positions and those restricted or prohibited by statute from flying Army aircraft. These records will be kept in an inactive file either with operational aviator files or with military personnel records as specified by major Army command (MACOM) commanders.
- ! Other personnel authorized to take part in aerial flights and for whom the Army certifies and keeps flight records.
- ! Persons attending initial entry flight training.

b. The forms and other documents used to maintain flight records are filed in DA Form 3513 (Individual Flight Records Folder) (IFRF), US Army. Paragraph 7–3 discusses folder labeling procedures for these forms. Figures 7–1 and 7–2 show two approved methods of labeling. Table 7–1 shows initiation procedures for DA Form 4186. Table 7–2 shows how closeout forms are distributed. The forms used to maintain flight records are—

- ! DA Form 759 (Individual Flight Record and Flight Certificate—Army).
- ! DA Form 759–1 (Individual Flight Record and Flight Certificate—Army, Aircraft Closeout Summary).
- ! DA Form 759–2 (Individual Flight Record and Flight Certificate—Army, Flying Hour Work Sheet).

- ! DA Form 759–3 (Individual Flight Record and Flight Certificate—Army, Flight Record and Flight Pay Work Sheet).
- ! DA Form 201A (Field Personnel File Divider).
- ! DA Form 4186 (Medical Recommendation for Flying Duty).
- ! Initial aviator qualification documentation for instructor pilot/standardization instructor pilot/instructor flight examiner/maintenance test pilot (IP/IE/MP).
- ! All flight status orders (Issuance/Termination) from the first time to the present and initial and current nonrated crewmember instructor/ nonrated crewmember standardization instructor/nonrated crewmember trainer/flight engineer (FI/SI/NCT/FE) orders for nonrated crewmembers.
- ! Aviation special skill badge orders.
- ! Any other documentation the commander requires to be posted in the IFRF.

7–3. INDIVIDUAL FLIGHT RECORDS FOLDER

a. Folder Labeling Procedures. Labels will be typed or neatly printed. The two approved methods of labeling the IFRF according to AR 25–400–2 are as follows:

(1) The first method of labeling the IFRF is with the minimum information outlined in AR 25–400–2, chapter 6. (See sample at Figure 7–1.) Using two labels is recommended because of the amount of information required for labeling folders. The use of rank is optional because of promotions. AR 25–400–2 requires the use of the Privacy Act system number. The number can be found in DA Pam 25–51.

95–1a. Individual Flight Records Jones, Jerry L. DOB: 10 FEB 62 111–11–1111 RANK: (optional) Privacy Act Sys AO095–1aTRADOC	DISPOSITION: Forward with the individual personnel records jacket on reassignment, change of duty status, retirement, discharge, or death of individual.
---	---

Figure 7–1 . Sample IFRF labeled with minimum information

(2) The second method of labeling the IFRF is the use of a dummy folder. When using a dummy folder, an empty IFRF will be taped shut, the file information posted, and the folder placed in the front of all succeeding files. Subsequent folder labels need only show the file number and contents of the individual folder. (See sample at Figure 7–2.)

b. Lost or Destroyed Folders. When an individual's IFRF is lost or destroyed, the record is reconstructed through the most accurate means available. The individual's last duty station is first contacted to obtain a record from the 60–day hold file of the AFRS or the backup discs. If this is not an option, the record is generated from the individual's personal copy of the flight records. An

individual in transit should not carry his copy of the flight records in the same container as the original copy. This should prevent loss due to inaccessible or lost baggage. Reservists should contact: CDR, ARPERCEN, ATTN: DARPBOPCBAB(ATSS), St. Louis, MO 63132-5200. National Guardsmen should contact: Chief, NGB, ATTN: NGB-AVNBOC, APG, MD. Actions to locate missing documentation must be annotated on Part V of DA 759. Methods used to verify flight hours concerning these individuals must also be annotated.

95-1a Smith, Bart J.		DOB: 5 JUL 66
222-22-2222		RANK: CW2

95-1a Jones, Jerry L.		DOB: 11 FEB 62
111-11-1111		RANK: CPT

95-1a Individual Flight Records		
Active	Privacy Act Sys AO095-1aTRADOC	
Disposition: Forward with the individual personnel records jacket on reassignment, change of duty status, retirement, discharge, or death of individual.		

..... (TAPED SHUT)

Figure 7-2. Sample dummy folder

c. Folder Disposition.

(1) Forward the IFRF with the individual on reassignment. The IFRF will be hand-receipted to the individual when it leaves the possession of the flight records custodian. The individual will sign for the IFRF for temporary duty (TDY), permanent change of station (PCS), or attendance at the Eastern Army Aviation Training Site (EAATS), Western Army Aviation Training Site (WAATS), or United States Army Aviation Center (USAAVNC). Chargeout forms will be maintained for records according to AR 25-400-2.

(2) Aviators in nonoperational aviation positions and those restricted or prohibited by statute from flying Army aircraft will have their records kept either in an inactive file with operational aviator files or with military personnel records as prescribed by the MACOM commander.

(3) The Commander, US Army Reserve Personnel Center, ATTN: DARP-OPC-AV (ATSS), St. Louis, MO 63132-5200, will store the individual flight records of all aviators, nonrated crewmembers who have flight records, and flight surgeons after retirement, discharge, resignation, assignment to US Army Reserve (USAR) control group or death.

7-4. FILE ARRANGEMENT

a. Right side of DA Form 3513. DA Forms 759 and 759B1 for rated crewmembers are arranged for permanent file on the right side of the IFRF. The most current closeout is on top. DA Forms 759, 759-1, and 759-3 for nonrated crewmembers also are arranged for permanent file on the right side of the folder with the most current closeout on top. All forms included in a given closeout will be labeled with the series number only. For example, on the fifth closeout for an individual, all forms will be labeled, "Sheet No. 5." They will not be marked, "5-1, 5-2, ... etc." Forms generated by AFRS will not have page numbers, the requirement for identification of pages by number has been dropped. Figure 7-3 shows examples of the arrangement of closeout forms.

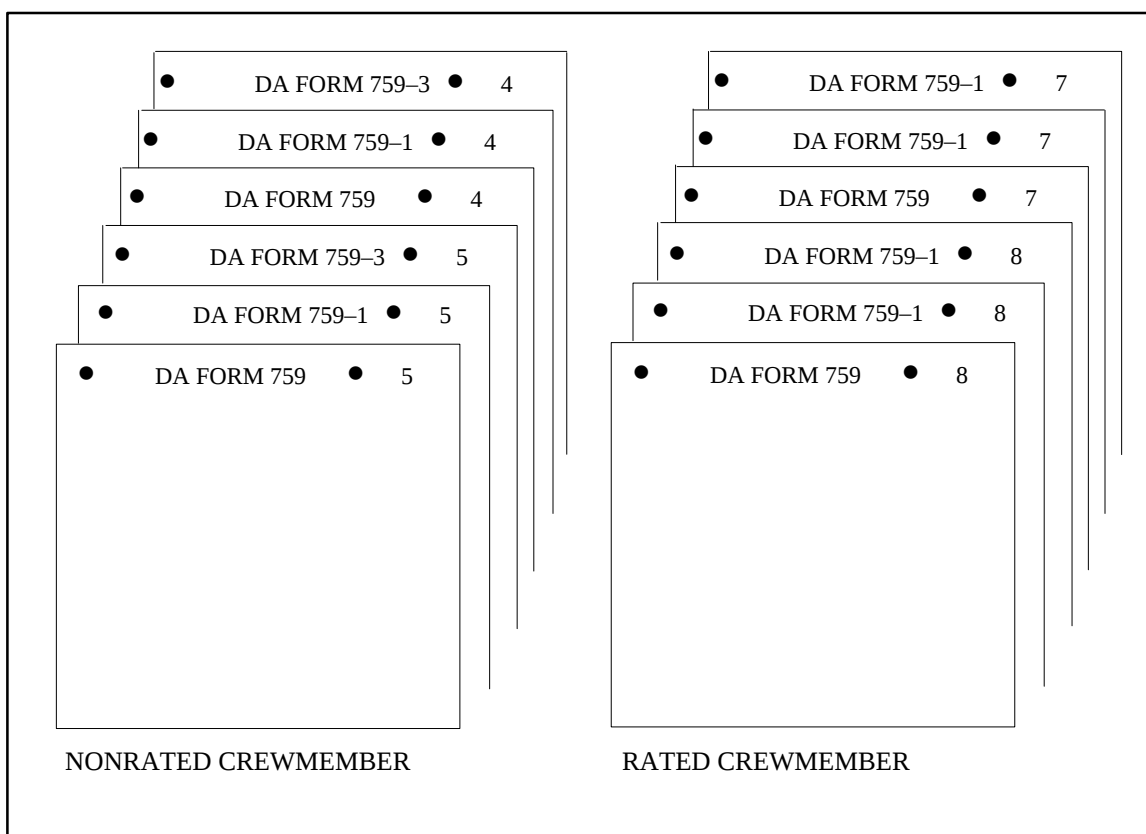


Figure 7-3. Arrangement of DA Form 3513 (right side)

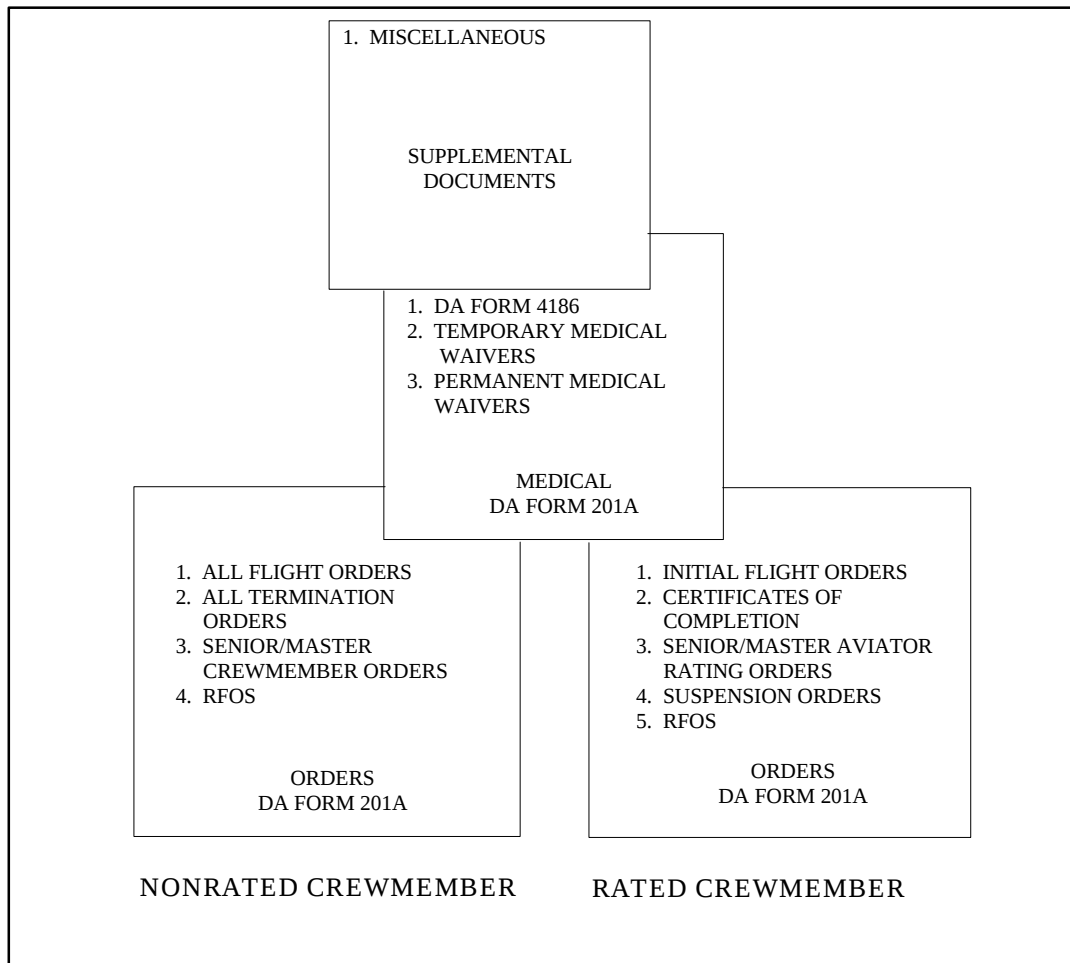


Figure 7-4. Arrangement of DA Form 3513 (left side)

b. Left side of DA Form 3513. Subject areas are separated with DA Forms 201A that are labeled "Supplemental Documents," "Medical," and "Orders." Documents on the left side of the IFRF are arranged in the order listed from top to bottom. Figure 7-4 shows examples of the arrangement of documents on the left side of the folder.

(1) Supplemental Documents. Miscellaneous documents are posted in this section. This gives the commander an area to post documents that do not fall under any other classification. This includes items such as 120-day notices, SF 88s, NGB/USAR assignment instructions, and anything else the commander designates as required documentation.

NOTE: An envelope containing a 3 1/2-inch disk copy of the latest closeout will be included in the IFRF when the records custodian changes. This will be placed on top of the DA Form 201A labeled "Supplemental Documents."

(2) Medical.

(a) A DA Form 4186 (Medical Recommendation for Flying Duty) is placed in the IFRF at the times specified in Table 7–1. The commander, the individual and flight surgeon must complete their areas of the form before it is filed in the IFRF according to AR 40–501 (Standards in Medical Fitness).

(b) Copies of medical suspensions or waivers are filed—with clearly stated periods of retention—for any action recommended by the flight surgeon.

Table 7–1. Initiation of DA Form 4186 (Medical Recommendation for Flying Duty)

OCCURRENCE	RETENTION
Completion of annual medical examination	Until expiration date
Medical suspension	Until closeout of the DA Form 759
Medical suspension still in effect during the closeout period	Until terminated
Termination of medical suspension	Until closeout of the DA Form 759
Medical clearance when the individual reports to the new duty station	Until closeout of the DA Form 759
Assignment to an operational flying duty position from a nonoperational flying duty position	Until closeout of the DA Form 759
Medical clearance after an aircraft accident	Until closeout of the DA Form 759

(3) Orders.

(a) Copies of aviation service or flying status orders, aeronautical certification (certificates of completion), and suspension orders (other than for medical disqualification) are placed in this section. All copies of nonrated crewmember and noncrewmember flying status orders (to be performed and to be terminated) are retained.

(b) Certificate of completion for instructor pilot (IP), instrument flight examiner (IE), maintenance test pilot (MP), nonrated crewmember instructor (FI), and nonrated standardization instructor (SI) will be placed in this section. If individual holds any of these positions a copy of the DA Form 7120–R (Commander's Task List) will be used to designate what position the aviator holds in the flight records.

(c) Orders for senior/master crewmember badges and senior/master aviator badges are also placed in this section. AR 600–105 contains the procedures for determining eligibility criteria for aeronautical ratings (senior or master Army aviator). An aviator's total operational flying duty credit (TOFDC) can be obtained from the individual's Officer Record Brief (ORB). Operations can

request a copy of this from their unit Personnel Administration Center (PAC). AR 600-8-22 contains eligibility criteria for a senior or master crewmember badges.

(d) Request for orders are placed in this section. They will be maintained in this section until the actual orders are received and then removed and destroyed.

NOTE: Appendixes J and K contain examples of a flight records checklist for a rated aviator and a nonrated crewmember, respectively. These checklists are used to maintain the flight records and may be modified to suit the unit's needs.

7-5. CLOSING FLIGHT RECORDS

a. DA Forms 759 and 759-1 are prepared when the flight records are closed. These forms are required for all individuals on flight status. A consolidated DA Form 759-3 is prepared when the records of nonrated personnel or aviators in a fly for pay status are closed. A birth month closeout must be provided to the aviator within 10 working days from the end of the aviator's birth month. Records are closed at the following times:

(1) At the end of the birth month of an aviator, flight surgeon, or nonrated crewmember. This applies only to aviators and flight surgeons in operational flying positions.

(2) Upon death.

(3) Upon termination of flying status.

(4) Upon a change of designation (noncrewmember to crewmember or vice versa), change of duty status (operational to nonoperational), or change of aviation service (active or reserve).

(5) Upon disqualification from flying status.

(6) When directed by an aircraft accident investigation board.

(7) Upon a change of assignment or attachment governing flying duty. (A closeout is not required when the flight records custodian does not change.)

(8) When the aviator attends a skill qualification identifier (SQI) type school (i.e., MTP, Instructor Pilot Course, etc.). The aviator's flight records will accompany him to the course so that time and remarks at the course can be entered into the records at the completion of the course.

b. Each DA Form 759 is numbered consecutively. For example, if an individual's records have been closed three times and this is the fourth closeout, the sheet number will be 4. A requirement no longer exists to individualize the sheets within a closeout.

c. The DA Form 759 has four parts; all parts must be completed. The DA Form 759 must be signed by the individual's commander to be considered valid. DA Form 759 is distributed according to Table 7-2.

Table 7–2. Distribution of flight record forms upon closeout

PERSONNEL CATEGORIES	ORIGINAL	FIRST COPY	SECOND COPY
Operational active duty, ARNG aviators or flight surgeons who accomplish or fail to accomplish required minimums	Retain in the IFRF.	To the individual	Not required
Other personnel on active duty who qualify for incentive pay	Retain in the IFRF.	To the individual	Not required
Army Reserve aviators, flight surgeons, or medical officers in aviation service but not on extended active duty who accomplish the required annual minimums	Retain in the IFRF.	To the individual	Forward to Cdr, Reserve Components Personnel and Admin Center, ATTN: DARPBOPCBAV/ATSS, St. Louis, MO 63132–5000, for file in the individual's personnel records
Other Army Reserve crewmembers in aviation service but not on extended active duty who qualify for incentive pay	Retain in the IFRF.	To the individual	Not required
Note 1: Forward with the individual personnel records jacket on reassignment, change of duty status, retirement, discharge, or death. Note 2: Individuals must retain a copy of their flight records. This will facilitate the reconstruction of their flight records in case of the records becoming lost or destroyed.			

7B6. TRANSCRIBING FLIGHT TIME

a. Flight time is transcribed from DA Form 2408–12 to DA Forms 759, 759–1, 759–2, and 759–3. The pilot in command (PC) is responsible for accurately completing DA Form 2408–12. DA Pamphlet (Pam) 738–751 is the governing regulation for completing DA Form 2408–12. AR 95–1 defines flying duty, mission, and flight condition symbols used in preparing DA Forms 2408–12, 759, 759–1, 759–2, and 759–3.

b. DA Form 2408–12 is retained for 3 calendar months by unit operations according to DA Pam 738–751.

c. Flight time from civilian fixed–wing (FW) or rotary–wing (RW) logbooks is authorized after verification by the operations officer.

7-7. FLYING STATUS MANAGEMENT

a. Rated Crewmembers. Army aviators are authorized flying status according to AR 600-105.

NOTE: Flight surgeons are rated officers but not included in the rated inventory of Army aviators according to AR 600-105. Any additional information can be found in AR 600-105.

b. Nonrated Crewmembers. Nonrated crewmembers and noncrewmembers are authorized flying status according to AR 600-106. Individuals must first meet the criteria outlined in AR 600-106 and then pass a Class II or Class III flight physical before orders are requested.

(1) Request for orders. A request for orders (RFO) will be submitted according to AR 600-8-105 and local procedures. A copy of the signed RFO will be kept in the IFRF in the "Orders" section until the approved orders placing the individual on flying status are received.

(2) Nonrated flight status positions. Operations should maintain a chart reflecting all nonrated flight slots listed in the modified table of organization and equipment (MTOE)/table of distribution and allowances (TDA) by paragraph and line number and individuals who fill these positions. The chart may also list additional blocks such as night vision goggles (NVG) qualification, birth month, flight physical, PCS date, or anything else tailored to fit specific unit needs. This will greatly assist in managing flight slots and replacing outbound individuals.

(3) 120-day notice. A written notice must be given to enlisted crewmembers before termination from flight status (noncrewmembers do not require a notice). This must be given at least 120 days before termination and can be given earlier. AR 600-106 discusses requirements for this action. After the notice is signed by the individual and the unit commander, it is placed in the IFRF under "Supplemental Documents." This notification will also be annotated to DA Form 759, Part IV. (See Appendix J, page J-3.)

c. DA Form 4186. Individuals who do not have a current flight physical or a flight physical extension will be suspended from flying status until medical clearance is given. Commanders will notify the servicing FAO when nonrated personnel have been suspended from flying status.

d. Minimum Flying Time. The minimum number of monthly flight hours qualifying crewmembers, noncrewmembers, and flight surgeons for hazardous duty incentive pay (HDIP) is found in the DOD Pay and Entitlements Manual. This also applies to certain fly-for-pay aviators who have failed to make their 12- or 18-year gate (as outlined in AR 600-105). These aviators must qualify monthly to continue receiving aviation career incentive pay (ACIP).

(1) The DOD Pay and Entitlements Manual provides an in-depth discussion of the requirements for HDIP and aviation career incentive pay (ACIP) and the tracking of flight hours. The intent of this regulation is to allow individuals to make up missed flight time and then receive pay; the intent is not to pay them and hope they make up the time before their grace period expires. If an individual fails to meet the requirements one month, the flight pay is taken immediately.

(2) Each month, review individual flight records to determine if any individuals have failed to meet that month's flight requirements or have made up flight requirements for a previous missed

month. (See Table 7–6, NOTE for additional instructions for excess time use and grace periods.) Prepare DA Form 4730–R (Certificate for Performance of Hazardous Duty) according to AR 37–104–4. The unit commander or designated representative will sign the form. (His social security number (SSN) will be included in the signature block.) Forward the form to the local finance office. If DA Form 4730–R is not used, submit a flight pay certificate in memorandum format. (See Appendix J, page J–1.) This form must be submitted no later than the tenth of the month to ensure action occurs on that month's pay period. A copy is retained for 2 years and filed according to MARKS.

7–8. ARMY AVIATOR-S FLIGHT RECORD — DA FORM 2408–12

Information for each flight of an Army aircraft is logged on DA Form 2408–12 (Army Aviator-s Flight Record). This form has information about the aircraft and crewmembers that flew in the aircraft. It also has other maintenance information that needs to be entered on the form for each flight. DA Pam 738–751 is the guide for properly filling out DA Form 2408–12.

a. Aircraft time flown, duty, and type of flight performed by the crewmembers are recorded on the DA Form 2408–12. This information is used to track the amount and type of flying duty that crewmembers perform for input into their flight records. An example is shown at Figure 7–5.

b. The pilot ensures that DA Form 2408–12 is completed properly and that all essential information is entered for all crewmembers and noncrewmembers aboard for each flight. Any passengers will be maintained on a separate manifest.

c. Information contained on DA Form 2408–12 that is of special interest for the completion of flight records and other reports generated by flight operations will be highlighted on Figure 7–6 and is listed below.

(1) Block 1. Date. – The date will be entered by the pilot. This date will represent the date of the start of the first flight.

(2) Block 2. Serial Number. – The serial number of the aircraft.

(3) Block 3. Model. – Aircraft model number.

(4) Block 4. Organization. – The unit or activity the aircraft is assigned to.

(5) Block 5. Station. – Post or APO where the aircraft is stationed.

(6) Block 6a. Flight Data. – This block contains information that needs to be checked carefully because of the effect miscalculated hours have on unit status reports (USRs).

(a) On the row marked Atime, the block AFLT HRS represents the total time the aviator has logged as PC, IP, SP, UT, IE, ME, MP, or XP. The "from" time is subtracted from the last "to" time and the result is entered in the "FLT HRS" block. None of these positions may be simultaneously logged by another crewmember during the same flight. The time represents the total hours placed on the airframe for that flight.

(b) The next row contains the AMission ID. The STD block will contain the mission symbol for the mission; i.e., AT@Btraining , AC@Bcombat, etc. This mission symbol will be transcribed to the aviator*s flight record. The authorized entries for this block are—

A—acceptance test flight.

C—combat mission directly against the enemy within a designated combat zone.

F—maintenance test flight.

S—service missions, other than A, C, F, T, or X.

T—training flight for individual qualification, refresher, mission, or continuation.

X—experimental test flight.

D—imminent danger. Applies when imminent danger special pay is authorized according to Department of Defense (DOD) Pay Manual, chapter 10.

(7) Block 6b. Personnel Data – The name, rank, Personal Identification Number (PID)/Social Security Account Number (SSAN) of the crew will be entered before flight.

(8) Block 6c. The line to the right of the personnel data provide the Duty Symbol (DS), Flight Symbol (FS), Hours (HR), and Seat designation (S) blocks for the crewmember for that portion of the mission. The following are the authorized entries for these blocks:

(a) DS (Duty Symbol). The duty position the crewmember is holding during that portion of the flight.

! AO—aeroscout/aerial observer.

! CE—crewchief, or aircraft mechanic assigned to a crewchief position.

! CP—copilot. This symbol is used by an aviator who is at the copilot station but is not qualified or current in the aircraft being flownCor who is performing copilot duties at other than copilot station and is undergoing training or evaluation conducted by an IP, SP, IE, UT, or ME; for example:
nap-of-the-earth (NOE) navigation, instrument navigation, and so forth.

! FE—flight engineer.

! FI—nonrated crewmember instructor.

! IE—instrument examiner.

! IP—instructor pilot

! ME—maintenance test pilot evaluator.

- ! MO—flight surgeon or other medical personnel.
- ! MP—maintenance test pilot.
- ! OR—aircraft maintenance personnel, technical observer, fire fighter, aerial photographer, gunner, or duties requiring flight.
- ! PC—pilot in command. A designated pilot in command who is performing assigned duties as IP, SP, UT, IE, ME, MP, or XP will not use this symbol. In these cases, the specific symbol will be used to indicate the duty being performed by the PC.
- ! PI—pilot.
- ! SI—nonrated crewmember standardization instructor.
- ! SP—standardization instructor pilot.
- ! UT—unit trainer. When this symbol is used, a grade slip must be completed for the aviator undergoing training.
- ! XP—experimental test pilot.

(b) FS (Flight Condition) Each crewmember will use only one of the following symbols to identify the condition or mode of flight for any time period.

- ! AA—air to air.
- ! D—day. Between the hours of official sunrise and sunset.
- ! DS—day vision system. Night vision system installed on aircraft used during the day; also logged when two or more devices are used.
- ! H—hood/simulated instrument meteorological condition (IMC). Vision of the person flying the aircraft is artificially limited from viewing the horizon or earth surface. Aircraft must be controlled using aircraft instruments. An observer is required for all hooded flights.
- ! N—night. Between the hours of official sunset and sunrise.
- ! NG—night goggles. Night vision goggles used during the night.
- ! NS—night system. Night vision system installed on aircraft used during the night; also logged when two or more devices are used simultaneously.
- ! W—weather. Actual weather conditions that do not permit visual contact with the horizon or earth surface. Aircraft attitude must be controlled using aircraft instruments.

(c) HR (Hours). The amount of time spent in the duty position.

(d) S (Seat) In aircraft requiring designation of seat occupied, the stations will be annotated AF@ for front seat or AB@ for back seat.

(9) The reverse of the form has two more sets of Block 6 for subsequent flights and /or crew changes.

(10) Block 8. Totals. – The AFlight Hours@ block will contain the total airframe hours placed on the aircraft during it*s mission. This time represents the total of all the AFLT HRS@ contained in all blocks 6a on the form.

1. DATE 27 AUG 96		2. SERIAL NUMBER 9424235		3. MODEL AH-64A		4. ORGANIZATION C Troop, 1/6 Cav		5. STATION Ft. Hood, TX										
6.a. FLIGHT 1 DATA		FROM Local		TO				TO										
TIME	FROM 12:30	TO :	TO: 14:30	FLT HRS 2.0	LDG: STD 6	AUTO 0	STARTS: #1 #2											
MISSION ID	STD T	CONFIG	LOADS: INTERNAL		EXTERNAL	PASSENGERS	CYC	HSF										
ROUNDS	7.62	20mm	30mm 39	40mm	ROCKET	TOW	HELLFIRE											
STATUS	7.62	20mm	30mm	40mm	ROCKET	TOW	HELLFIRE											
HIT CHECK	NO. 1 ENGINE +1	NO. 2 ENGINE B1	APU: STARTS 2		HOURS 0.5	HOUR METER HRS												
b. PERSONNEL DATA			c. SYMBOL/HOURS/SEAT DUTY SYMBOL/FLIGHT															
NAME	RANK	PID/SSAN	DS	FS	HR	S	DS	FS	HR	S	DS	FS	HR	S	DS	FS	HR	S
Johnson, B.	CW3	513049287	PC	D	2.0	B												
Byrum, B.	CW3	375011444	PI	D	2.0	F												
----- LAST	ENTRY	-----																
7. SERVICING DATA																		
FUEL ADDED (GALLONS)	GRADE	IN TANKS	OIL 1	GRADE	OIL 2	GRADE	APU	GRADE	OXY-GEN	ANTI-ICING	SERVICED BY	LOCATION						
	JP4	300	7	23699	7	23699	2	23699			G. Coonan	Hood AAF, TX (HLR)						
354	JP4	375	1	23699	1	23699	0	23699			G. Coonan	Hood AAF, TX (HLR)						
191	JP4	375									G. Coonan	Hood AAF, TX (HLR)						
545			8		8		2					TOTALS						

DA FORM 2408B12, JAN 92
EDITION OF JAN 64 IS OBSOLETE

ARMY AVIATOR'S FLIGHT RECORD
For use of this form, see DA PAM 738751; the
proponent agency is DCSLOG.

Figure 7-5. Sample of DA Form 2408-12 (Army Aviator's Flight Record)(Illustration 1)

6.a. FLIGHT 2		DATA		FROM Local		TO		TO										
TIME	FROM 15:30	TO: :	TO: 17:00	FLT HRS 1.5	LDG: STD 6	STARTS: #1 #2												
MISSION ID	STD T	CONFIG	LOADS: INTERNAL	EXTERNAL	PASSENGERS	CYC	HSF											
ROUNDS	7.62	20mm	30mm	40mm	ROCKET	TOW	HELLFIRE											
STATUS	7.62	20mm	30mm	40mm	RCKT	TO W	HF	APU: STARTS 2	HOUR METER HOURS									
					HOURS 0.4													
b. PERSONNEL DATA					c. DUTY SYMBOL/FLIGHT SYMBOL/HOURS/SEAT													
NAME	RANK	PID/SSAN	DS	FS	HR	S	DS	FS	HR	S	DS	FS	HR	S	DS	FS	HR	S
Acree, R.	CW2	467872759	PC	H	1.0	B	PC	D	0.5	B								
Salter, R.	CW2	437288419	PI	D	1.5	F												
-----LAST	ENTRY	-----																
6.a. FLIGHT 3		DATA		FROM Local		TO		TO										
TIME	FROM 17:50	TO: :	TO: 18:50	FLT HRS 1.0	LDG: STD 3	AUTO 0	STARTS: #1 #2											
MISSION ID	STD T	CONFIG	LOADS: INTERNAL	EXTERNAL	PASSENGERS	CYC	HSF											
ROUNDS	7.62	20mm	30mm 50	40mm	ROCKET	TOW	HELLFIRE											
STATUS	7.62	20mm	30mm	40mm	RCKT	TOW	HF	APU: STARTS 2	HOUR METER HOURS									
					HOURS 0.4													
b. PERSONNEL DATA					c. DUTY SYMBOL/FLIGHT SYMBOL/HOURS/SEAT													
NAME	RANK	PID/SSAN	DS	FS	HR	S	DS	FS	HR	S	DS	FS	HR	S	DS	FS	HR	S
Shelton, L..	LTC	503660516	PC	H	0.5	B	PC	D	0.5	B								
Brewer, T.	CW2	426279163	PI	D	1.0	F												
-----LAST	ENTRY	-----																
8. TOTALS		FLIGHT HRS 4.5		LANDINGS: STD 15		AUTO		APU: STARTS 6				HOURS 1.3						
HOUR METER STARTS			STARTS: #1 #2			CYCLES			HSF									
ROUNDS	7.62	20mm	30mm 89	40mm	ROCKET	TOW	HELLFIRE											

REVERSE OF DA FORM 2408-12, JAN 92

Figure 7-6. Sample of DA Form 2408-12 (Army Aviator's Flight Record) (Illustration 2)

7B9. TEMPORARY WORKSHEET (RATED CREWMEMBER)

DA Form 759-2 is used as a temporary worksheet to record information about each flight performed by a rated crewmember. It also may be used as a monthly record (consolidation worksheet). Table 7-3 contains instructions for completing DA Form 759-2 as a temporary worksheet. Figures 7-7 and 7-8 show a sample temporary worksheet. General information for completing the temporary worksheet is provided below.

a. DA Form 759-2 is arranged in three sections (A, B, and C). This allows entries for three types of aircraft, flight simulators, and/or seat designations. If a individual flies more than three different aircraft and/or flight simulators during an annual period, an additional temporary worksheet will be used.

b. Information for the temporary worksheet is taken from DA Forms 2408B12. Entries are made in pencil. A single line can be used for data entry when the date, duty symbol, flight condition, and mission symbol (combat and imminent danger flights only) are the same. The hours flown are combined for these like entries. When this information is not the same, a separate line is used.

c. As many entries can be made on the form as space allows for both daily and monthly use. A new form for each month is not required. A blank line is left after each month's entries.

d. Flight time is entered in hours and tenths of hours.

e. A new temporary worksheet must be initiated each time the flight records are closed. The old worksheets may be given to the aviator or destroyed.

f. The temporary worksheet is not filed with DA Forms 759 and 759-1 when the individual's flight are closed.

Table 7-3. Instructions for completing a temporary worksheet (Rated Crewmember)

ITEM	INSTRUCTIONS
Block 1	Enter the last name, first name, and middle initial.
Block 2	Enter the rank.
Block 3	Enter the SSN.
Block 4	Enter the period covered. (mm,yy C mm,yy)
Sections A, B, and C	Enter the aircraft mission, type, design, and series or flight simulator and, if applicable, the seat designation. (Example: AHB64(FS), 2B40(BS).)
NOTE: Blocks a through d will be completed using information from DA Form 2408-12.	
Column a	Enter the date of flight. The first entry in a month will be the month, followed by the day in the space underneath.
Column b	Enter the duty symbol.
Column c	Enter the flight condition symbol
Column d	Enter the mission symbol, if applicable. The only mission symbols requiring entry are C (combat) and D (imminent danger).
Column e	Enter the hours and tenths of hours for each individual entry on DA Form 2408B12. Flights with the same duty symbol and flight condition may be collated into one entry for that day's flight.
NOTE 1: If no time was flown in an aircraft or flight simulator listed in Section A, B, or C for an entire month, enter the month in column a and the comment "NO TIME FLOWN" across columns b through e. NOTE 2: Enter flight simulator time (military) in the same manner as a separate type of aircraft. NOTE 3: Aircraft and flight simulator entries that are logged by seat designation (DA Form 2408-12, block 6c) will be logged using the appropriate letters. Use a separate section on DA Form 759-2 for each designated seat position. (FS, BS)	

INDIVIDUAL FLIGHT RECORDS AND CERTIFICATE — ARMY														
For use of this form, see AR 95-1 and FM 1-300; the proponent agency is ODCSOPS.														
FLYING HOURS WORK SHEET														
1. Name <i>Foster, Kenneth B.</i>					2. Rank <i>CW3</i>		3. SSN <i>421-81-7473</i>			4. Period <i>Jun 92—May 93</i>				
Section A. (<i>UH-60A</i>)					Section B. (<i>2B38</i>)					Section C. (<i>AH-64A (BS)</i>)				
Date	Duty Sym	Flt Cond	Msn Sym	Hours	Date	Duty Sym	Flt Cond	Msn Sym	Hours	Date	Duty Sym	Flt Cond	Msn Sym	Hours
a.	b.	c.	d.	e.	a.	b.	c.	d.	e.	a.	b.	c.	d.	e.
<i>Jun</i>					<i>Jun</i>					<i>Jun</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>	
<i>4</i>	<i>PI</i>	<i>D</i>		<i>2.0</i>	<i>22</i>	<i>PI</i>	<i>W</i>		<i>2.5</i>					
<i>10</i>	<i>PC</i>	<i>N</i>		<i>1.5</i>						<i>Feb</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>	
<i>18</i>	<i>PC</i>	<i>D</i>		<i>1.5</i>	<i>Jul</i>									
					<i>8</i>	<i>PI</i>	<i>N</i>		<i>1.5</i>	<i>Aug</i>				
<i>Jul</i>					<i>28</i>	<i>PI</i>	<i>W</i>		<i>2.0</i>	<i>2</i>	<i>PI</i>	<i>D</i>		<i>1.5</i>
<i>9</i>	<i>PI</i>	<i>D</i>		<i>0.6</i>						<i>9</i>	<i>PI</i>	<i>N</i>		<i>1.0</i>
<i>15</i>	<i>PI</i>	<i>N</i>		<i>1.5</i>	<i>Aug</i>									
<i>23</i>	<i>PI</i>	<i>N</i>		<i>1.5</i>	<i>6</i>	<i>PC</i>	<i>D</i>		<i>1.5</i>	<i>Sep</i>				
<i>29</i>	<i>PC</i>	<i>D</i>		<i>1.5</i>	<i>6</i>	<i>PC</i>	<i>W</i>		<i>1.5</i>	<i>11</i>	<i>PI</i>	<i>D</i>		<i>2.0</i>
					<i>19</i>	<i>PC</i>	<i>N</i>		<i>1.5</i>	<i>14</i>	<i>PI</i>	<i>NG</i>		<i>1.0</i>
<i>Aug</i>					<i>19</i>	<i>PC</i>	<i>TR</i>		<i>1.5</i>					
<i>3</i>	<i>PI</i>	<i>N</i>		<i>0.9</i>						<i>Oct</i>				
<i>4</i>	<i>PI</i>	<i>TR</i>		<i>2.2</i>	<i>Sep</i>					<i>6</i>	<i>PI</i>	<i>D</i>		<i>1.6</i>
<i>5</i>	<i>PI</i>	<i>TR</i>		<i>2.0</i>	<i>1</i>	<i>PC</i>	<i>TR</i>		<i>1.5</i>					
<i>11</i>	<i>PC</i>	<i>NG</i>		<i>2.5</i>	<i>1</i>	<i>PC</i>	<i>W</i>		<i>1.5</i>	<i>Nov</i>				
<i>12</i>	<i>PC</i>	<i>NG</i>		<i>2.5</i>						<i>9</i>	<i>PI</i>	<i>D</i>	<i>D</i>	<i>1.5</i>
<i>13</i>	<i>PC</i>	<i>NG</i>		<i>1.3</i>	<i>Oct</i>					<i>11</i>	<i>PI</i>	<i>D</i>	<i>D</i>	<i>1.5</i>
<i>18</i>	<i>PC</i>	<i>TR</i>		<i>1.7</i>	<i>5</i>	<i>PC</i>	<i>W</i>		<i>1.5</i>	<i>16</i>	<i>PC</i>	<i>D</i>	<i>D</i>	<i>2.0</i>
					<i>5</i>	<i>IE</i>	<i>W</i>		<i>1.5</i>	<i>17</i>	<i>PC</i>	<i>D</i>	<i>D</i>	<i>3.0</i>
<i>Sep</i>										<i>18</i>	<i>PC</i>	<i>D</i>	<i>D</i>	<i>3.0</i>
<i>8</i>	<i>UT</i>	<i>D</i>		<i>4.0</i>	<i>Nov</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>		<i>19</i>	<i>PC</i>	<i>NG</i>	<i>D</i>	<i>2.2</i>
<i>9</i>	<i>UT</i>	<i>W</i>		<i>1.0</i>										
<i>9</i>	<i>PC</i>	<i>W</i>		<i>2.0</i>	<i>Dec</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>		<i>Dec</i>				
<i>10</i>	<i>PC</i>	<i>W</i>		<i>3.4</i>						<i>1</i>	<i>PI</i>	<i>D</i>	<i>C</i>	<i>3.1</i>
<i>23</i>	<i>UT</i>	<i>D</i>		<i>4.0</i>	<i>Jan</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>		<i>2</i>	<i>PI</i>	<i>AA</i>	<i>C</i>	<i>2.0</i>
<i>24</i>	<i>UT</i>	<i>D</i>		<i>0.4</i>						<i>3</i>	<i>PI</i>	<i>D</i>	<i>C</i>	<i>3.0</i>
<i>24</i>	<i>UT</i>	<i>NG</i>		<i>1.8</i>	<i>Feb</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>		<i>3</i>	<i>PI</i>	<i>AA</i>	<i>C</i>	<i>1.0</i>
										<i>5</i>	<i>PI</i>	<i>N</i>	<i>C</i>	<i>2.3</i>
<i>Oct</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>		<i>Mar</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>		<i>7</i>	<i>PI</i>	<i>N</i>	<i>C</i>	<i>2.0</i>
										<i>7</i>	<i>PI</i>	<i>NG</i>	<i>C</i>	<i>1.6</i>
<i>Nov</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>		<i>Apr</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>		<i>10</i>	<i>PI</i>	<i>D</i>	<i>C</i>	<i>2.0</i>
<i>Dec</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>		<i>May</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>		<i>Jan</i>				
										<i>4</i>	<i>PI</i>	<i>AA</i>	<i>C</i>	<i>3.0</i>
<i>Jan</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>							<i>15</i>	<i>PI</i>	<i>AA</i>	<i>C</i>	<i>3.3</i>
<i>Feb</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>							<i>Feb</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>	
<i>Mar</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>							<i>Mar</i>				
										<i>30</i>	<i>PI</i>	<i>N</i>	<i>C</i>	<i>1.0</i>

DA FORM 759-2, SEP 86

Figure 7-7. Sample temporary worksheet (Rated Crewmember)(Illustration 1)

INDIVIDUAL FLIGHT RECORDS AND CERTIFICATE C ARMY														
For use of this form, see AR 95B1 and FM 1B300; the proponent agency is ODCSOPS.														
FLYING HOURS WORK SHEET														
1. Name <i>Foster, Kenneth B.</i>					2. Rank <i>CW3</i>		3. SSN <i>421-81-7473</i>			4. Period <i>Jun 92—May 93</i>				
Section A. (2B40 (BS))					Section B. (AHB64A (BS))					Section C. (UHB60A)				
Date	Duty Sym	Flt Cond	Msn Sym	Hours	Date	Duty Sym	Flt Cond	Msn Sym	Hours	Date	Duty Sym	Flt Cond	Msn Sym	Hours
a.	b.	c.	d.	e.	a.	b.	c.	d.	e.	a.	b.	c.	d.	e.
<i>Jun</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>		<i>Apr</i>					<i>Apr</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>	
					<i>5</i>	<i>PC</i>	<i>NG</i>	<i>C</i>	<i>2.5</i>					
<i>Jul</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>		<i>7</i>	<i>PC</i>	<i>NG</i>	<i>C</i>	<i>2.0</i>	<i>May</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>	
					<i>13</i>	<i>PC</i>	<i>NG</i>	<i>C</i>	<i>1.2</i>					
<i>Aug</i>														
<i>17</i>	<i>PI</i>	<i>W</i>		<i>2.0</i>	<i>May</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>						
<i>17</i>	<i>PI</i>	<i>TR</i>		<i>1.5</i>										
<i>17</i>	<i>PI</i>	<i>D</i>		<i>0.5</i>										
<i>24</i>	<i>PI</i>	<i>D</i>		<i>2.5</i>										
<i>24</i>	<i>PI</i>	<i>W</i>		<i>1.5</i>										
<i>Sep</i>														
<i>2</i>	<i>PI</i>	<i>D</i>		<i>2.0</i>										
<i>Oct</i>														
<i>7</i>	<i>PI</i>	<i>N</i>		<i>3.5</i>										
<i>Nov</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>											
<i>Dec</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>											
<i>Jan</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>											
<i>Feb</i>														
<i>8</i>	<i>PC</i>	<i>D</i>		<i>2.0</i>										
<i>8</i>	<i>PC</i>	<i>N</i>		<i>2.0</i>										
<i>15</i>	<i>PC</i>	<i>D</i>		<i>0.5</i>										
<i>15</i>	<i>PC</i>	<i>W</i>		<i>1.0</i>										
<i>15</i>	<i>PC</i>	<i>TR</i>		<i>1.5</i>										
<i>Mar</i>														
<i>2</i>	<i>PC</i>	<i>D</i>		<i>2.0</i>										
<i>2</i>	<i>PC</i>	<i>N</i>		<i>2.0</i>										
<i>8</i>	<i>PC</i>	<i>N</i>		<i>1.0</i>										
<i>8</i>	<i>PC</i>	<i>N</i>		<i>2.0</i>										
<i>15</i>	<i>PC</i>	<i>N</i>		<i>2.0</i>										
<i>Apr</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>											
<i>May</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>											

DA FORM 759B2, SEP 86

Figure 7B8. Sample temporary worksheet (Rated Crewmember)(Illustration 2)

7-10. CONSOLIDATION WORKSHEET (RATED CREWMEMBER)

Table 7-4 contains detailed information for completing a DA Form 759-2 as a consolidation worksheet. Figures 7-9 and 7-10 show a sample consolidation worksheet. General instructions are provided below.

a. Maintain a monthly consolidation worksheet for the aircraft/flight simulator an aviator flies during the period covered by the DA Form 759-2 temporary worksheet. Arrange the consolidation worksheets identical to the temporary worksheets. Complete the consolidation worksheet in pencil.

b. Take information for the consolidation worksheets from the temporary worksheets. At the end of each month, consolidate all like entries for each section (A, B, or C) on the temporary worksheet. Then, make a separate one line entry to the consolidation worksheet for each like entry in a given month.

c. The time is consolidated by aircraft, flying duty symbol, flight condition symbol, and mission symbol only if any entries are C (combat) or D (imminent danger) for each month. The total time is entered in hours and tenths of hours.

d. Be sure the period covered for all entries appearing on the consolidation worksheet is accurately reflected in block 4.

e. Leave a blank space between each months entries on the consolidation worksheet. For the months in which no hours were recorded, the month is entered in column a and the comment "NO TIME FLOWN" is entered across columns b through e.

Table 7–4. Instructions for completing a consolidated worksheet (Rated Crewmember)

ITEM	INSTRUCTIONS
Block 1	Enter the last name, first name, and middle initial.
Block 2	Enter the rank.
Block 3	Enter the Social Security Number (SSN).
Block 4	Enter the period covered (mm,yy – mm,yy).
Column a	Enter the month that covers the applicable set of entries to be consolidation from the temporary worksheet.
Columns b, c, and e	At the end of each month, total the number of hours flown for each group of like flights (same duty and flight condition symbols from the temporary worksheet). On the consolidation worksheet, make a separate line entry for each group of like flights and record the total in hours and tenths of hours in column e. Flights that cannot be consolidated are transferred to the consolidation worksheet as shown on the temporary worksheet. Do not make entries in column d.
NOTE 1: Procedures for transferring flight simulator time (military) to the consolidation worksheet are the same as those for aircraft flight time. NOTE 2: Combat (C) and imminent danger (D) time. If there are flights with the mission symbol "C" or "D" recorded on the temporary worksheet, enter as applicable "Combat" or "Imminent Danger" on the line following the last entry for the month on the consolidation sheet. Total the number of hours flown during the month for each group of like flights from the temporary worksheet (same duty symbol and "C" or "D" as the mission symbol). Make a separate line entry for each group of like flights on the consolidation sheet. (This must be done in addition to consolidating combat flights with other flights explained above for columns b, c, and e.) NOTE 3: Consolidate AH–64 Apache and RAH–66 Comanche time according to seat occupied.	

INDIVIDUAL FLIGHT RECORDS AND FLIGHT CERTIFICATE – ARMY														
For use of this form, see AR 95-1 and FM 1-300; the proponent agency is ODCSOPS.														
FLYING HOURS WORK SHEET														
1. Name <i>Foster, Kenneth B.</i>					2. Rank <i>CW3</i>		3. SSN <i>421-81-7473</i>			4. Period <i>Jun 92—May 93</i>				
Section A. (UH-60A)					Section B. (2B38)					Section C. (AH-64A (BS))				
Date	Duty Sym	Flt Cond	Msn Sym	Hours	Date	Duty Sym	Flt Cond	Msn Sym	Hours	Date	Duty Sym	Flt Cond	Msn Sym	Hours
a.	b.	c.	d.	e.	a.	b.	c.	d.	e.	a.	b.	c.	d.	e.
<i>Jun</i>	<i>PI</i>	<i>D</i>		<i>2.0</i>	<i>Jun</i>	<i>PI</i>	<i>W</i>		<i>2.5</i>	<i>Jun</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>	
	<i>PC</i>	<i>N</i>		<i>1.5</i>										
	<i>PC</i>	<i>D</i>		<i>1.5</i>	<i>Jul</i>	<i>PI</i>	<i>N</i>		<i>1.5</i>	<i>Jul</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>	
						<i>PI</i>	<i>W</i>		<i>2.0</i>					
<i>Jul</i>	<i>PI</i>	<i>D</i>		<i>0.6</i>						<i>Aug</i>	<i>PI</i>	<i>D</i>		<i>1.5</i>
	<i>PI</i>	<i>N</i>		<i>3.0</i>	<i>Aug</i>	<i>PC</i>	<i>D</i>		<i>1.5</i>		<i>PI</i>	<i>N</i>		<i>1.0</i>
	<i>PC</i>	<i>D</i>		<i>1.5</i>		<i>PC</i>	<i>W</i>		<i>1.5</i>					
						<i>PC</i>	<i>N</i>		<i>1.5</i>	<i>Sep</i>	<i>PI</i>	<i>D</i>		<i>2.0</i>
<i>Aug</i>	<i>PI</i>	<i>N</i>		<i>0.9</i>		<i>PC</i>	<i>TR</i>		<i>1.5</i>		<i>PI</i>	<i>NG</i>		<i>1.0</i>
	<i>PI</i>	<i>TR</i>		<i>4.2</i>										
	<i>PC</i>	<i>NG</i>		<i>6.3</i>	<i>Sep</i>	<i>PC</i>	<i>TR</i>		<i>1.5</i>	<i>Oct</i>	<i>PI</i>	<i>D</i>		<i>1.6</i>
	<i>PC</i>	<i>TR</i>		<i>1.7</i>		<i>PC</i>	<i>W</i>		<i>1.5</i>					
										<i>Nov</i>	<i>PI</i>	<i>D</i>	<i>D</i>	<i>3.0</i>
<i>Sep</i>	<i>UT</i>	<i>D</i>		<i>8.4</i>	<i>Oct</i>	<i>PC</i>	<i>W</i>		<i>1.5</i>		<i>PC</i>	<i>D</i>	<i>D</i>	<i>8.0</i>
	<i>UT</i>	<i>W</i>		<i>1.0</i>		<i>IE</i>	<i>W</i>		<i>1.5</i>		<i>PC</i>	<i>NG</i>	<i>D</i>	<i>2.2</i>
	<i>UT</i>	<i>NG</i>		<i>1.8</i>										
	<i>PC</i>	<i>W</i>		<i>5.4</i>	<i>Nov</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>		<i>Dec</i>	<i>PI</i>	<i>D</i>	<i>C</i>	<i>8.1</i>
											<i>PI</i>	<i>AA</i>	<i>C</i>	<i>3.0</i>
<i>Oct</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>		<i>Dec</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>			<i>PI</i>	<i>N</i>	<i>C</i>	<i>4.3</i>
											<i>PI</i>	<i>NG</i>	<i>C</i>	<i>1.6</i>
<i>Nov</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>		<i>Jan</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>						
										<i>Jan</i>	<i>PI</i>	<i>AA</i>	<i>C</i>	<i>6.3</i>
<i>Dec</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>		<i>Feb</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>						
										<i>Feb</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>	
<i>Jan</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>		<i>Mar</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>						
										<i>Mar</i>	<i>PI</i>	<i>N</i>	<i>C</i>	<i>1.0</i>
<i>Feb</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>		<i>Apr</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>						
										<i>Apr</i>	<i>PC</i>	<i>NG</i>	<i>C</i>	<i>5.7</i>
<i>Mar</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>		<i>May</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>						
<i>Apr</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>											
<i>May</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>											

DA FORM 759-2, Sep 86

Figure 7-9. Sample consolidation worksheet (Rated Crewmember) (Illustration 1)

7-11. TEMPORARY WORKSHEET (NONRATED CREWMEMBER)

The DA Form 759-3 is used as a temporary worksheet to record information about each flight performed by a nonrated crewmember. It also may be used as a monthly record (consolidation worksheet). It incorporates the format in AR 37-104-4 to help flight records personnel in managing monthly flight requirements for entitlement to HDIP. Table 7-5 contains instructions for completing DA Form 759-3 as a temporary worksheet. Figures 7-11 through 7-14 show sample temporary worksheets. General instructions are provided below.

a. Information for the temporary worksheet is taken from DA Forms 2408-12. A single line is used when the date, aircraft, flying duty symbol, flight condition symbol, and mission symbol are the same. The hours flown are combined for these like entries. When any of this information is not the same, a separate line is used.

b. As many entries can be made on the form as space allows for daily use. A new form for each month is not required. A blank line is left after each month's entries.

c. Flight time is entered, in pencil, in hours and tenths of hours.

d. For the months in which no hours were recorded, the month is entered in column a and the comment "NO TIME FLOWN" is entered across columns b through f.

e. The temporary worksheet is not filed with DA Forms 759 and 759-1 when the nonrated crewmember's flight records are closed. The unit commander or operations officer determines how long the worksheets are retained. (Ninety days are recommended.)

Table 7–5. Instructions for completing a temporary worksheet (Nonrated Crewmember)

ITEM	INSTRUCTIONS
Block 1	Leave blank (sheet number not required).
Block 2	Enter the last name, first name, and middle initial.
Block 3	Enter the rank.
Block 4	Enter the SSN.
Block 5	Enter the period covered (mm,yy — mm,yy).
Block 6	Enter the type of flying status (Crewrated member(CRM) or noncrewrated member (NCRM)).
Block 7	Enter the effective date from the flight orders.
Column a	Enter the date of flight. The first entry in a month will be the month, followed by the day in the space underneath.
Column b	Enter the aircraft mission, type, design, and series.
Column c	Enter the flying duty symbol recorded on DA Form 2408–12.
Column e	Enter the mission symbol recorded on DA Form 2408–12.
NOTE: Mission symbols are necessary to ensure that the hours recorded on DA Form 2408–12 are consistent with the duties performed as described in the original flight orders. Example: A maintenance supervisor should not expect HDIP for hours logged with a mission symbol other than AF.0 (See AR 600–106.)	
Column f	Enter the hours flown in hours and tenths of hours.
Column g	Leave blank. These blocks will be completed at the end of the month on the consolidation worksheet.
Blocks 8 through 16	Leave blank.

INDIVIDUAL FLIGHT RECORD AND FLIGHT CERTIFICATE -- ARMY For use of this form, see AR 95-1 and FM 1-300; the proponent agency is ODCSOPS.											
FLIGHT RECORD AND FLIGHT PAY WORK SHEET										1. Sheet No.	
2. Name <i>Baron, Redmon T.</i>						3. Rank <i>MAJ</i>		4. SSN <i>547-66-8091</i>			
5. Period <i>Jun 92—May 93</i>						6. Flying Status <i>CRM</i>		7. Effective Date <i>1 Apr 90</i>			
Date/ Month	Acft	Flying Duty Sym	Flt Cond Sym	Msn Sym	Hours Flown	Entitle- ment Yes or No g.	Based on Hours Flown During h.	Excess Hours		Remarks k.	
a.	b.	c.	d.	e.	f.			This Month i.	Accum j.		
<i>Jun</i>											
<i>15</i>	<i>UH-1H</i>	<i>MO</i>	<i>D</i>	<i>S</i>	<i>4.5</i>						
<i>21</i>	<i>UH-1H</i>	<i>MO</i>	<i>N</i>	<i>T</i>	<i>4.0</i>						
<i>Jul</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>								
<i>Aug</i>											
<i>4</i>	<i>UH-60A</i>	<i>MO</i>	<i>D</i>	<i>S</i>	<i>7.5</i>						
<i>Sep</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>								
<i>Oct</i>											
<i>12</i>	<i>UH-60A</i>	<i>MO</i>	<i>D</i>	<i>T</i>	<i>8.0</i>						
<i>Nov</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>								
<i>Dec</i>											
<i>17</i>	<i>UH-1H</i>	<i>MO</i>	<i>D</i>	<i>T</i>	<i>7.4</i>						
<i>Jan</i>	<i>UH-60A</i>	<i>MO</i>	<i>N</i>	<i>T</i>	<i>4.6</i>						
<i>Feb</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>								
<i>Mar</i>											
<i>2</i>	<i>UH-60A</i>	<i>MO</i>	<i>D</i>	<i>T</i>	<i>8.0</i>						
<i>Apr</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>								
<i>May</i>											
<i>21</i>	<i>UH-1H</i>	<i>MO</i>	<i>D</i>	<i>S</i>	<i>4.5</i>						
Total Hours This Sheet					8.	Hours From Sheet No.			11.	Total Hours to Date	14.
Total Combat Hours This Sheet					9.	Combat Hours From Sheet No.			12.	Total Combat Hours to Date	15.
Total Imminent Danger Hours This Sheet					10.	Imminent Danger Hours From Sheet No.			13.	Total Imminent Danger Hours to Date	16.

DA FORM 759-3, Aug 93

Figure 7-11. Sample temporary worksheet (Flight Surgeon)

INDIVIDUAL FLIGHT RECORD AND FLIGHT CERTIFICATE -- ARMY For use of this form, see AR 95-1 and FM 1-300; the proponent agency is ODCSOPS.											
FLIGHT RECORD AND FLIGHT PAY WORK SHEET										1. Sheet No.	
2. Name <i>Smith, Jonathan P.</i>						3. Rank <i>SSG</i>		4. SSN <i>211-98-5188</i>			
5. Period <i>Aug 92—Jun 93</i>						6. Flight Status <i>CRM</i>		7. Effective Date <i>1 Aug 92</i>			
Date/ Month	Acft	Flying Duty Sym	Flt Cond Sym	Msn Sym	Hours Flown	Entitle- ment Yes or No g.	Based on Hours Flown During h.	Excess Hours		Remarks k.	
a.	b.	c.	d.	e.	f.			This Month i.	Accum j.		
<i>Aug</i>											
18	CH-47C	FI	D	T	2.0						
23	CH-47C	FI	D	T	1.6						
25	CH-47C	FI	NG	T	1.5						
27	CH-47C	FI	NG	T	2.3						
<i>Sep</i>											
1	CH-47D	FI	NG	T	1.6						
4	CH-47D	FI	NG	T	1.3						
7	CH-47D	FI	NG	D	1.5						
<i>Oct</i>											
2	CH-47C	FE	D	D	1.7						
6	CH-47D	FE	NG	D	3.0						
<i>Nov</i>											
10	CH-47C	FE	D	D	1.5						
14	CH-47C	FE	D	D	2.1						
<i>Dec</i>											
6	CH-47C	FE	D	D	2.1						
10	CH-47C	FE	D	D	2.4						
<i>Jan</i>											
17	CH-47D	FE	D	C	3.2						
19	CH-47D	FE	NG	C	3.0						
21	CH-47D	FE	D	C	3.1						
<i>Feb</i>											
2	CH-47C	FE	D	D	2.6						
4	CH-47C	FE	NG	D	1.5						
Total Hours This Sheet					8.	Hours From Sheet No.			11.	Total Hours to Date	14.
Total Combat Hours This Sheet					9.	Combat Hours From Sheet No.			12.	Total Combat Hours to Date	15.
Total Imminent Danger Hours This Sheet					10.	Imminent Danger Hours From Sheet No.			13.	Total Imminent Danger Hours to Date	16.

DA FORM 759-3, Aug 93

Figure 7-12. Sample temporary worksheet (Flight Engineer Instructor) (Illustration 1)

INDIVIDUAL FLIGHT RECORD AND FLIGHT CERTIFICATE -- ARMY For use of this form, see AR 95-1 and FM 1-300; the proponent agency is ODCSOPS.											
FLIGHT RECORD AND FLIGHT PAY WORK SHEET										1. Sheet No.	
2. Name <i>Smith, Jonathan P.</i>						3. Rank <i>SSG</i>			4. SSN <i>211-98-5188</i>		
5. Period <i>Aug 92—Jun 93</i>						6. Flight Status <i>CRM</i>			7. Effective Date <i>1 Aug 92</i>		
Date/ Month	Acft	Flying Duty Sym	Flt Cond Sym	Msn Sym	Hours Flown	Entitle- ment Yes or No g.	Based on Hours Flown During h.	Excess Hours This Month i. Accum j.		Remarks k.	
<i>Feb</i>											
<i>7</i>	<i>CH-47D</i>	<i>FE</i>	<i>NG</i>	<i>C</i>	<i>3.4</i>						
<i>10</i>	<i>CH-47D</i>	<i>FE</i>	<i>NG</i>	<i>C</i>	<i>2.1</i>						
<i>14</i>	<i>CH-47D</i>	<i>FE</i>	<i>NG</i>	<i>C</i>	<i>3.0</i>						
<i>Mar</i>											
<i>3</i>	<i>CH-47C</i>	<i>FE</i>	<i>D</i>	<i>D</i>	<i>2.1</i>						
<i>7</i>	<i>CH-47C</i>	<i>FE</i>	<i>NG</i>	<i>D</i>	<i>1.7</i>						
<i>10</i>	<i>CH-47C</i>	<i>FE</i>	<i>D</i>	<i>D</i>	<i>1.9</i>						
<i>15</i>	<i>CH-47C</i>	<i>FE</i>	<i>D</i>	<i>D</i>	<i>2.3</i>						
<i>17</i>	<i>CH-47C</i>	<i>FE</i>	<i>NG</i>	<i>D</i>	<i>1.4</i>						
<i>Apr</i>											
<i>4</i>	<i>CH-47D</i>	<i>FE</i>	<i>D</i>	<i>D</i>	<i>1.6</i>						
<i>6</i>	<i>CH-47D</i>	<i>FE</i>	<i>D</i>	<i>D</i>	<i>2.3</i>						
<i>10</i>	<i>CH-47D</i>	<i>FE</i>	<i>D</i>	<i>D</i>	<i>1.9</i>						
<i>May</i>											
<i>1</i>	<i>CH-47D</i>	<i>FE</i>	<i>D</i>	<i>D</i>	<i>2.0</i>						
<i>5</i>	<i>CH-47D</i>	<i>FE</i>	<i>NG</i>	<i>D</i>	<i>2.2</i>						
<i>10</i>	<i>CH-47D</i>	<i>FE</i>	<i>NG</i>	<i>D</i>	<i>1.8</i>						
<i>12</i>	<i>CH-47D</i>	<i>FE</i>	<i>D</i>	<i>D</i>	<i>1.5</i>						
<i>Jun</i>											
<i>4</i>	<i>CH-47C</i>	<i>FE</i>	<i>D</i>	<i>D</i>	<i>2.0</i>						
<i>7</i>	<i>CH-47C</i>	<i>FE</i>	<i>NG</i>	<i>D</i>	<i>1.5</i>						
<i>13</i>	<i>CH-47C</i>	<i>FE</i>	<i>D</i>	<i>D</i>	<i>1.5</i>						
Total Hours This Sheet					8.	Hours From Sheet No.			11.	Total Hours to Date	14.
Total Combat Hours This Sheet					9.	Combat Hours From Sheet No.			12.	Total Combat Hours to Date	15.
Total Imminent Danger Hours This Sheet					10.	Imminent Danger Hours From Sheet No.			13.	Total Imminent Danger Hours to Date	16.

DA Form 759-3, Aug 93

Figure 7-13. Sample temporary worksheet (Flight Engineer Instructor) (Illustration 2)

INDIVIDUAL FLIGHT RECORD AND FLIGHT CERTIFICATE -- ARMY For use of this form, see AR 95-1 and FM 1-300; the proponent agency is ODCSOPS.											
FLIGHT RECORD AND FLIGHT PAY WORK SHEET										1. Sheet No.	
2. Name <i>Kuhn, Peter W.</i>						3. Rank <i>SFC</i>		4. SSN <i>226-59-4801</i>			
5. Period <i>Jan 93—Jun 93</i>						6. Flying Status <i>NCRM</i>		7. Effective Date <i>1 Jan 93</i>			
Date/ Month	Acft	Flying Duty Sym	Flt Cond Sym	Msn Sym	Hours Flown	Entitle- ment Yes or No g.	Based on Hours Flown During h.	Excess Hours		Remarks k.	
a.	b.	c.	d.	e.	f.			This Month i.	Accum j.		
<i>Jan</i>											
<i>4</i>	<i>UH-1H</i>	<i>OR</i>	<i>NG</i>	<i>T</i>	<i>2.0</i>						
<i>7</i>	<i>UH-1H</i>	<i>OR</i>	<i>NG</i>	<i>T</i>	<i>1.8</i>						
<i>14</i>	<i>UH-1H</i>	<i>OR</i>	<i>NG</i>	<i>T</i>	<i>2.3</i>						
<i>Feb</i>											
<i>3</i>	<i>UH-1H</i>	<i>OR</i>	<i>D</i>	<i>T</i>	<i>1.8</i>						
<i>4</i>	<i>UH-1H</i>	<i>OR</i>	<i>D</i>	<i>T</i>	<i>1.5</i>						
<i>11</i>	<i>UH-1H</i>	<i>OR</i>	<i>D</i>	<i>T</i>	<i>1.5</i>						
<i>21</i>	<i>UH-1H</i>	<i>OR</i>	<i>D</i>	<i>T</i>	<i>1.5</i>						
<i>Mar</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>								
<i>Apr</i>											
<i>6</i>	<i>UH-1H</i>	<i>OR</i>	<i>NG</i>	<i>T</i>	<i>1.4</i>						
<i>14</i>	<i>UH-1H</i>	<i>OR</i>	<i>D</i>	<i>T</i>	<i>1.8</i>						
<i>25</i>	<i>UH-1H</i>	<i>OR</i>	<i>NG</i>	<i>T</i>	<i>1.3</i>						
<i>May</i>											
<i>1</i>	<i>UH-1H</i>	<i>OR</i>	<i>D</i>	<i>T</i>	<i>2.5</i>						
<i>17</i>	<i>UH-1H</i>	<i>OR</i>	<i>NG</i>	<i>T</i>	<i>1.6</i>						
<i>26</i>	<i>UH-1H</i>	<i>OR</i>	<i>NG</i>	<i>T</i>	<i>1.4</i>						
<i>Jun</i>	<i>No</i>	<i>Time</i>	<i>Flown</i>								
Total Hours This Sheet					8.	Hours From Sheet No.			11.	Total Hours to Date	14.
Total Combat Hours This Sheet					9.	Combat Hours From Sheet No.			12.	Total Combat Hours to Date	15.
Total Imminent Danger Hours This Sheet					10.	Imminent Danger Hours From Sheet No.			13.	Total Imminent Danger Hours to Date	16.

DA FORM 759-3, Aug 93

Figure 7-14. Sample temporary worksheet (Platoon Sergeant)

7-12. CONSOLIDATION WORKSHEET (NONRATED CREWMEMBER)

DA Form 759-3 is used as a permanent monthly record of flight time, by aircraft, for each nonaviator on flying status. Table 7-6 contains instructions for completing DA Form 759-3 as a consolidation worksheet. Figures 7-15 through 7-17 show a sample of a consolidation worksheet. General information for completing the consolidation worksheet is provided below.

a. The consolidated worksheet is numbered the same series as the DA Form 759. For example, if this is the fifth closeout, the consolidated worksheet is labeled sheet number 5.

b. A DA Form 759-3 is prepared when the flight records of a nonrated crewmember or noncrewmember are closed. Information is taken from the temporary worksheets that pertain to the period covered and the previous DA Form 759-3 consolidation worksheet or worksheets. All entries must be typed.

c. The time is consolidated by aircraft, flying duty symbol, flight condition symbol, and mission symbol (only if any entries are combat or imminent danger) for each month. The total time is entered in hours and tenths of hours.

d. As many entries to the form as space allows are made. A blank line is left after each month's entries. All entries must be typed.

e. For the months in which no hours were recorded, the month is entered in column a and the comment "NO TIME FLOWN" is entered across columns b through f.

Table 7-6. Instructions for completing a consolidation worksheet

ITEM	INSTRUCTIONS
Block 1	Enter the chronological sheet number.
Blocks 2 through 7	Transcribe information to these blocks from the individual's temporary work sheet.
Column a	Enter the month that covers each set of entries to be consolidated from the temporary worksheet.
Columns b through f	At the end of each month, total the number of hours flown for each group of like flights from the temporary worksheet or sheets. Enter the totals in these columns.
Column g	For each month in which the minimum flight requirements have been met, enter yes. If the flight requirements have not been met and excess hours are not sufficient to meet these requirements, enter no.
NOTE: Excess time from the previous 5 months may be used to qualify for entitlement of HDIP for the month in which minimum hours were not met. If time cannot be recovered from the previous 5 months, a 3-month grace period will start. The 3-month grace period will start with the first month minimum hours have not been met. Any	

Table 7–6. Instructions for completing a consolidation worksheet—continued

ITEM	INSTRUCTIONS
additional information concerning this action can be found in DOD Military Pay and Allowances Entitlements Manual (DOD 7000.14–R).	
Column h	Leave blank unless excess hours are needed to qualify for entitlement to HDIP; enter the month or months and the number of excess hours used from each month to meet that requirement.
Column i	Enter any excess flight time, in hours and tenths of hours, for the current month.
Column j	Enter any accumulated excess flight time, in hours and tenths of hours, from the previous months.
NOTE: Hours in column j are adjusted when the period for which hours can no longer be carried forward ends. When an adjustment is made, an explanation is entered in column k.	
Column k	Explain hours used for or taken from (if not apparent in column h) any month to qualify for entitlement to HDIP in another month. Explain any adjustment made to the total in column j. Explain entitlement when hours for that entitlement are based on a portion of the month. Also explain any temporary restriction from flying duty in which flight hours or entitlement is affected.
Block 8	Total the hours in column f, and enter the total in this block.
NOTE: When the consolidation worksheet requires two or more pages, place the cumulative total in block 8 of the last sheet.	
Block 9	Total the combat hours in column f, and enter the total in this block.
Block 10	Total the imminent danger hours in column f, and enter the total in this block.
Block 11	Enter the total hours from block 14 of the previous consolidated DA Form 759–3. Indicate the sheet number of the previous consolidated DA Form 759–3 in the space provided.
Block 12	Enter the total hours from block 15 of the previous consolidated DA Form 759–3. Indicate the sheet number of the previous consolidated DA Form 759–3 in the space provided.
Block 13	Enter the total hours from block 16 of the previous consolidated DA Form 759–3. Indicate the sheet number of the previous consolidated DA Form 759–3 in the space provided.
Block 14	Add block 8 to block 11. Enter the total in hours and tenths of hours.
Block 15	Add block 9 to block 12. Enter the total in hours and tenths of hours.
Block 16	Add block 10 to block 13. Enter the total hours and tenths of hours.

INDIVIDUAL FLIGHT RECORD AND FLIGHT CERTIFICATE -- ARMY For use of this form, see AR 95-1 and FM 1-300; the proponent agency is ODCSOPS.											
FLIGHT RECORD AND FLIGHT PAY WORK SHEET										1. Sheet No. 6	
2. Name Baron, Redmon T.							3. Rank MAJ		4. SSN 547-66-8091		
5. Period Jun 92—May 93							6. Flight Status CRM		7. Effective Date 1 Apr 90		
Date/ Month	Acft	Flying Duty Sym	Flt Cond Sym	Msn Sym	Hours Flown	Entitle- ment Yes or No g.	Based on Hours Flown During h.	Excess Hours		Remarks k.	
a.	b.	c.	d.	e.	f.			This Month i.	Accum j.		
Jun	UH-1H	MO	D		4.5	Yes		4.5	4.5	-4.0 for Jul	
	UH-1H	MO	N		4.0					-0.5 for Sep	
Jul	No	Time	Flown			Yes	Jun		0.5		
Aug	UH-60A	MO	D		7.5	Yes		3.5	4.0	-3.5 for Sep	
Sep	No	Time	Flown			Yes	Jun		0.0		
							Aug				
Oct	UH-60A	MO	D		8.0	Yes		4.0	4.0	-4.0 for Nov	
Nov	No	Time	Flown			Yes	Oct		0.0		
Dec	UH-1H	MO	D		7.4	Yes		3.4	3.4	-3.4 for Feb	
Jan	UH-60A	MO	N		4.6	Yes		0.6	4.0	-0.6 for Feb	
Feb	No	Time	Flown			Yes	Dec Jan 0.6		0.0		
Mar	UH-60A	MO	D		8.0	Yes		4.0	4.0	-4.0 for Apr	
Apr	No	Time	Flown			Yes	Mar 4.0		0.0		
May	UH-1H	MO	D		4.5	Yes		0.5	0.5		
Total Hours This Sheet					8. 48.5	Hours From Sheet No. 5			11. 253.4	Total Hours to Date	14. 301.9
Total Combat Hours This Sheet					9.	Combat Hours From Sheet No.			12.	Total Combat Hours to Date	15.
Total Imminent Danger Hours This Sheet					10.	Imminent Danger Hours From Sheet No.			13.	Total Imminent Danger Hours to Date	16.

DA FORM 759-3, Aug 93

Figure 7-15. Sample consolidated worksheet (Flight Surgeon)

INDIVIDUAL FLIGHT RECORD AND FLIGHT CERTIFICATE -- ARMY For use of this form, see AR 95-1 and FM 1-300; the proponent agency is ODCSOPS.													
FLIGHT RECORD AND FLIGHT PAY WORK SHEET										1. Sheet No. 10			
2. Name Smith, Jonathan P.							3. Rank SSG		4. SSN 211-98-5188				
5. Period Aug 92—Jun 93							6. Flying Status CRM		7. Effective Date 1 Aug 92				
Date/ Month	Acft	Flying Duty Sym	Flt Cond Sym	Msn Sym	Hours Flown	Entitle- ment Yes or No g.	Based on Hours Flown During h.	Excess Hours		Remarks k.			
a.	b.	c.	d.	e.	f.			This Month i.	Accum j.				
Aug	CH-47C	FI	D		3.6	Yes		3.4	3.4	-0.4 for Nov			
	CH-47C	FI	NG		3.8								
Sep	CH-47D	FI	NG		2.9	Yes		0.4	3.8				
	CH-47D	FI	NG	D	1.5								
Oct	CH-47C	FE	D	D	1.7	Yes		0.7	4.5				
	CH-47D	FE	NG	D	3.0								
Nov	CH-47C	FE	D	D	3.6	Yes	Aug 0.4		4.1				
Dec	CH-47C	FE	D	D	4.5	Yes		0.5	4.6				
Jan	CH-47D	FE	D	C	6.3	Yes		5.3	9.9				
	CH-47D	FE	NG	C	3.0								
Feb	CH-47C	FE	D	D	2.6	Yes		8.6	15.5	-3.0 from Aug			
	CH-47C	FE	NG	D	1.5								
	CH-47D	FE	NG	C	8.5								
Mar	CH-47C	FE	D	D	6.3	Yes		5.4	20.5	-0.4 from Sep			
	CH-47C	FE	NG	D	3.1								
Apr	CH-47D	FE	D	D	5.8	Yes		1.8	21.6	-0.7 from Oct			
May	CH-47C	FE	NG	D	4.0	Yes		3.5	25.1				
	CH-47D	FE	D	D	3.5								
Jun	CH-47C	FE	D	D	2.0	Yes		1.0	25.6	-0.5 from Dec			
	CH-47C	FE	NG	D	1.5								
	CH-47D	FE	D	D	1.5								
Total Hours This Sheet					8.	74.2	Hours From Sheet No. 9		11.	79.1	Total Hours to Date	14.	153.3
Total Combat Hours This Sheet					9.	17.8	Combat Hours From Sheet No.		12.		Total Combat Hours to Date	15.	17.8
Total Imminent Danger Hours This Sheet					10.	46.1	Imminent Danger Hours From Sheet No.		13.		Total Imminent Danger Hours to Date	16.	46.1

DA FORM 759-3, Aug 93

Figure 7-16. Sample consolidated worksheet (Flight Engineer Instructor)

[illegible]

Figure 7–17. Sample consolidated worksheet (Platoon Sergeant)

7-13. AIRCRAFT CLOSEOUT SUMMARY (RATED CREWMEMBER)

DA Form 759-1 is used as a record of flight time by flying duty and flight condition for each aircraft and/or flight simulator an individual flies during the closeout period. Do not prepare a DA Form 759-1 for aircraft not flown during the period covered. Table 7-7 contains instructions for completing DA Form 759-1 as an aircraft closeout summary. Sample aircraft closeout summaries are provided in Figures 7-18 through 7-21. General information for completing the aircraft closeout summary is provided below.

a. A DA Form 759-1 is filed with a DA Form 759 when an individual's flight record is closed. All entries will be typed.

b. Prepare a DA Form 759-1 for each aircraft or simulator listed on the individual's consolidation worksheet (Sections A, B, and C). All like entries are totaled from the worksheet by aircraft or flight simulator. The totals are carried forward to DA Form 759-1 when the individual's flight record is closed.

c. DA Forms 759-1 are numbered the same as DA Form 759. They will be arranged in the IFRF according to paragraph 7-3. (See Figures 7-3 and 7-4.)

Table 7-7. Instructions for completing an aircraft closeout summary (Rated Crewmember)

ITEM	INSTRUCTIONS
Block 1	Enter the chronological sheet number.
Blocks 2 through 5	Enter the appropriate information from blocks 1 through 4 of DA Form 759-2.
Block 6	Enter the aircraft mission, type, design, and series or flight simulator and, if applicable, the seat designation.
Lines 7 through 16 and columns a through j	From the corresponding DA Form 759-2, total the hours for all like entries according to flying duty and flight condition symbols. Enter the totals in hours and tenths of hours on the appropriate line in the correct column.
Note: Line 12 (NV) has been deleted from DA Form 759-1. This line will remain blank and is reserved for future use.	
Column k	Total the hours across lines 7 through 16 for each flight condition, and enter the totals in hours and tenths of hours in the corresponding lines of column k.
Column l	Enter the sheet number of the previous DA Form 759-1 at the top of this column. Then enter the totals from column m of the previous DA Form 759-1 for the same aircraft mission, type, design, and series or flight simulator and, if applicable, the seat designation.

Table 7-7. Instructions for completing an aircraft closeout summary (Rated Crewmember)

ITEM	INSTRUCTIONS
Column m	Add columns k and l across on lines 7 through 16, and enter the new totals in the corresponding lines of column m (in hours and tenths of hours).
Line 17	Total the hours downward in columns a through j. Enter the totals in hours and tenths of hours in the corresponding column on line 17.
NOTE: To check the total, add columns a through j across on line 17. This total should agree with the total of column k on line 17.	
Line 18	Enter the same sheet number at the beginning of this line as that entered at the top of column l. Enter the totals from line 19 of the previous DA Form 759-1 to the corresponding columns on this line.
NOTE: To check the total, add columns a through j across on line 18. This total should agree with the total of column l on line 18.	
Line 19	Add lines 17 and 18 downward, and enter the totals in hours and tenths of hours in the corresponding blocks on this line.
Line 20 Columns a through j	From the corresponding DA Form 759-2, total the combat hours for all like entries according to flying duty symbols. Enter these totals in the corresponding columns on line 20.
Line 21, Columns a through j	From the corresponding DA Form 759-2, total the imminent danger hours for all like entries according to flying duty symbols. Enter these totals in the corresponding columns on line 21.
Lines 20 and 21, column k	Add across columns a through g and enter the total in the corresponding block in lines 20 and 21, column k.
Lines 20 and 21, column l	From the previous DA Form 759-1, enter the totals from lines 20 and 21, column m into the corresponding block in lines 20 and 21, column l.
Lines 20 and 21, column m	Add the totals across in columns k and l and enter the totals into the corresponding block in lines 20 and 21, column m.

INDIVIDUAL FLIGHT RECORDS AND FLIGHT CERTIFICATE -- ARMY For use of this form, see AR 95-1 and FM 1-300; the proponent agency is ODCSOPS.														
AIRCRAFT CLOSEOUT SUMMARY												1. Sheet No. 35		
2. Name Foster, Kenneth B.				3. Rank CW3		4. SSN 421-81-7347		5. Period 92/06/01 to 93/05/31			6. Acft/Sys UH-60A			
Flight Cond Sym	FLYING DUTY SYMBOL										k. Total This Sheet	l. From Sheet No. 34	m. Total	
	a. CP/ CE	b. PI/ OR	c. PC/ AO	d. UT/ MO	e. IP/ FE	f. IE/ FI	g. SP/ SI	h. MP	i. ME	j. XP				
7. D		2.6	3.0	8.4								14.0	30.0	44.0
8. N		3.9	1.5									5.4	25.0	30.4
9. HO/H														
10. W			5.4	1.0								6.4	12.0	18.4
11. NG			6.3	1.8								8.1	18.5	26.6
12.														
13. NS													3.0	3.0
14.DG/ DS													2.5	2.5
15. TR		4.2	1.7									5.9	17.0	22.9
16. AA														
17. Total This Sheet		10.7	17.9	11.2								39.8	XXXX XXXX XXXX XXXX	XXXXXXXX XXXXXXXX XXXXXXXX XXXXXXXX
18. From Sheet No. 34		30.0	43.0	7.0	19.0	9.0						XXXX XXXX XXXX XXXX	108.0	XXXXXXXX XXXXXXXX XXXXXXXX XXXXXXXX
19. Total		40.7	60.9	18.2	19.0	9.0						XXXX XXXX XXXX	XXXX XXXX XXXX	147.8
20. Combat														
21. Immi- nent Danger														

DA FORM 759-1, Apr 98

Figure 7-18. Sample UH-60 aircraft closeout summary (Rated Crewmember)

INDIVIDUAL FLIGHT RECORDS AND FLIGHT CERTIFICATE – ARMY For use of this form, see AR 95-1 and FM 1-300; the proponent agency is ODCSOPS.														
AIRCRAFT CLOSEOUT SUMMARY												1. Sheet No. 35		
2. Name Foster, Kenneth B.			3. Rank CW3		4. SSN 421-81-7347		5. Period 92/06/01 to 93/05/31			6. Actt/Sys 2B-38				
Flight Cond Sym	FLYING DUTY SYMBOL										k. Total This Sheet	l. From Sheet No. 34	m. Total	
	a. CP/ CE	b. PI/ OR	c. PC/ AO	d. UT/ MO	e. IP/ FE	f. IE/ FI	g. SP/ SI	h. MP	i. ME	j. XP				
7. D			1.5									1.5	5.0	6.5
8. N		1.5	1.5									3.0	7.1	10.1
9. HO/ H														
10. W		4.5	4.5			1.5						10.5	9.9	20.4
11. NG														
12.														
13. NS														
14. DG/ DS														
15. TR			3.0									3.0	5.0	8.0
16. AA														
17. Total This Sheet		6.0	10.5			1.5						18.0	XXXXX XXXXX XXXXX XXXXX	XXXXXXXX XXXXXXXX XXXXXXXX XXXXXXXX
18. From Sheet No. 34		11.0	14.0			2.0						XXXX XXXX XXXX XXXX	27.0	XXXXXXXX XXXXXXXX XXXXXXXX XXXXXXXX
19. Total		17.0	24.5			3.5						XXXX XXXX XXXX	XXXXXX XXXXXX XXXXXX	45.0
20. Combat														
21. Immi- nent Danger														

DA FORM 759-1, Apr 98

Figure 7-19. Sample 2B38 aircraft closeout summary (Rated Crewmember)

INDIVIDUAL FLIGHT RECORDS AND FLIGHT CERTIFICATE – ARMY For use of this form, see AR 95-1 and FM 1-300; the proponent agency is ODCSOPS.													
AIRCRAFT CLOSEOUT SUMMARY											1. Sheet No. 35		
2. Name Foster, Kenneth B.			3. Rank CW3		4. SSN 421-81-7347		5. Period 92/06/01 to 93/05/31			6. Acft/Sys AH-64A(BS)			
Flight Cond Sym	FLYING DUTY SYMBOL										k. Total This Sheet	l. From Sheet No. 34	m. Total
	a. CP/ CE	b. PI/ OR	c. PC/ AO	d. UT/ MO	e. IP/ FE	f. IE/ FI	g. SP/ SI	h. MP	i. ME	j. XP			
7. D		16.2	8.0								24.2	15.1	39.3
8. N		6.3									6.3	10.9	17.2
9. HO/ H													
10. W													
11. NG		2.6	7.9								10.5	10.0	20.5
12.													
13. NS													
14. DG/ DS													
15. TR													
16. AA		9.3									9.3	10.0	19.3
17. Total This Sheet		34.4	15.9								50.3	XXXXX XXXXX XXXXX XXXXX	XXXXXXXXX XXXXXXXXX XXXXXXXXX XXXXXXXXX
18. From Sheet No. 34		30.0	16.0								XXXX XXXX XXXX XXXX	46.0	XXXXXXXXX XXXXXXXXX XXXXXXXXX XXXXXXXXX
19. Total		64.4	31.9								XXXX XXXX XXXX XXXX	XXXXX XXXXX XXXXX XXXXX	96.3
20. Combat		24.3	5.7								30.0		30.0
21. Immi- nent Danger		3.0	10.2								13.2		13.2

DA FORM 759-1, Apr 98

Figure 7-20. Sample AH-64 (BS) aircraft closeout summary (Rated Crewmember)

INDIVIDUAL FLIGHT RECORDS AND FLIGHT CERTIFICATE — ARMY For use of this form, see AR 95-1 and FM 1-300; the proponent agency is ODCSOPS.													
AIRCRAFT CLOSEOUT SUMMARY												1. Sheet No. 35	
2. Name Foster, Kenneth B.			3. Rank CW3		4. SSN 421-81-7347		5. Period 92/06/01 to 93/05/31			6. Acft/Sys 2B-40(BS)			
Flight Cond Sym	FLYING DUTY SYMBOL										k. Total This Sheet	l. From Sheet No. 34	m. Total
	a. CP/ CE	b. PI/ OR	c. PC/ AO	d. UT/ MO	e. IP/ FE	f. IE/ FI	g. SP/ SI	h. MP	i. ME	j. XP			
7. D		5.0	4.5								9.5		9.5
8. N		3.5	7.0								10.5		10.5
9. HO/ H													
10. W		3.5	3.0								6.5		6.5
11. NG													
12.													
13. NS													
14. DG/ DS													
15. TR		1.5	1.5								3.0		3.0
16. AA													
17. Total This Sheet		13.5	16.0								29.5	XXXX XXXX XXXX XXXX	XXXXXXXX XXXXXXXX XXXXXXXX XXXXXXXX
18. From Sheet No. 34											XXXX XXXX XXXX XXXX		XXXXXXXX XXXXXXXX XXXXXXXX XXXXXXXX
19. Total		13.5	16.0								XXXX XXXX XXXX XXXX	XXXX XXXX XXXX XXXX	29.5
20. Combat													
21. Immi- nent Danger													

DA FORM 759-1, Apr 98

Figure 7-21. Sample 2B40 (BS) aircraft closeout summary (Rated Crewmember)

7–14. AIRCRAFT CLOSEOUT SUMMARY (NONRATED CREWMEMBER)

A DA Form 759–1 is used as a record of flight time by duty and flight condition symbol for nonrated crewmembers (including noncrewmembers). Table 7–8 provides detailed instructions. Figures 7–22 through 7–25 are the examples. General information for completing the aircraft closeout summary is provided below.

a. A DA Form 759–1 is filed with a DA Form 759 when an individual's flight record is closed. All entries will be typed.

b. Prepare a DA Form 759–1 for each aircraft listed on the individual's DA Form 759–3 consolidation worksheets. All like entries are totaled from the worksheet by aircraft. The totals are carried forward to DA Form 759–1 when the individual's flight record is closed.

c. DA Forms 759–1 are numbered the same as DA Form 759. They will be arranged in the IFRF according to paragraph 7–3. (See Figure 7–3.)

Table 7–8. Instructions for completing an aircraft closeout summary (Nonrated Crewmember)

ITEM	INSTRUCTIONS
Block 1	Enter the chronological sheet number.
Blocks 2 through 5	Enter the appropriate information from blocks 2 through 5 of DA Form 759–3.
Block 6	Enter the aircraft mission, type, design, and series.
Lines 7 through 16 and columns a through g	From the corresponding DA Form 759–3, total the hours for all like entries according to flying duty and flight condition symbols. Enter the totals in hours and tenths of hours on the appropriate line in the correct column.
NOTE: Columns h through j are reserved for aviators.	
Column k	Total the hours across lines 7 through 16 for each flight condition, and enter the totals in hours and tenths of hours in the corresponding lines of column k.
Column l	Enter the sheet number of the previous DA Form 759–1 at the top of this column. Then enter the totals from column m of the previous DA Form 759–1 for the same aircraft mission, type, design, and series.
Column m	Add columns k and l across on lines 7 through 16, and enter the new totals in the corresponding lines of column m (in hours and tenths of hours).
Line 18	Enter the same sheet number at the beginning of this line as that entered at the top of column l. Enter the totals from line 19 of the previous DA Form 759–1 to the corresponding columns of this line.

Table 7-8. Instructions for completing an aircraft closeout summary (Nonrated Crewmember)—continued

ITEM	INSTRUCTIONS
NOTE: To check the total, add columns a through g across on line 17. This total should agree with the total of column k on line 17.	
NOTE: To check the total, add columns a through g across on line 18. This total should agree with the total of column l on line 18.	
Line 19	Add lines 17 and 18 downward, and enter the totals in hours and tenths of hours in the corresponding blocks on this line.
Line 20 Columns a through g	From the corresponding DA Form 759-3, total the combat hours for all like entries according to flying duty symbols. Enter these totals in the corresponding columns on line 20.
Line 21, Columns a through g	From the corresponding DA Form 759-3, total the imminent danger hours for all like entries according to flying duty symbols. Enter these totals in the corresponding columns on line 21.
Lines 20 and 21, column k	Add across columns a through g and enter the total in the corresponding block in lines 20 and 21, column k.
Lines 20 and 21, column l	From the previous DA Form 759-1, enter the totals from lines 20 and 21, column m into the corresponding block in lines 20 and 21, column l.
Lines 20 and 21, column m	Add the totals across in columns k and l and enter the totals into the corresponding block in lines 20 and 21, column m.

INDIVIDUAL FLIGHT RECORDS AND FLIGHT CERTIFICATE -- ARMY For use of this form, see AR 95-1 and FM 1-300; the proponent agency is ODCSOPS.														
AIRCRAFT CLOSEOUT SUMMARY												1. Sheet No. 6		
2. Name Baron, Redmon T.				3. Rank MAJ		4. SSN 547-66-8091		5. Period 92/06/01 to 93/06/30			6. Acft/Sys UH-1H			
Flight Cond Sym	FLYING DUTY SYMBOL										k. Total This Sheet	l. From Sheet No. 5	m. Total	
	a. CP/ CE	b. PI/ OR	c. PC/ AO	d. UT/ MO	e. IP/ FE	f. IE/ FI	g. SP/ SI	h. MP	i. ME	j. XP				
7. D				4.0								4.0	140.8	144.8
8. N														
9. HO/ H														
10. W														
11. NG														
12.														
13. NS														
14. DG/ DS														
15. TR														
16. AA														
17. Total This Sheet				4.0								4.0	XXXXX XXXXX XXXXX XXXXX	XXXXXXXXX XXXXXXXXX XXXXXXXXX XXXXXXXXX
18. From Sheet No. 5				140.8								XXXXX XXXXX XXXXX	140.8 XXXXX XXXXX XXXXX	XXXXXXXXX XXXXXXXXX XXXXXXXXX XXXXXXXXX
19. Total				144.8								XXXXX XXXXX XXXXX	XXXXX XXXXX XXXXX	144.8
20. Combat														
21. Immi- nent Danger														

DA FORM 759-1, Apr 98

Figure 7-22. Sample aircraft closeout summary (Flight Surgeon) (Illustration I)

INDIVIDUAL FLIGHT RECORDS AND CERTIFICATE – ARMY For use of this form, see AR 95-1 and FM 1-300; the proponent agency is ODCSOPS.														
AIRCRAFT CLOSEOUT SUMMARY												1. Sheet No. 6		
2. Name Baron, Redmon T.				3. Rank MAJ		4. SSN 547-66-8091		5. Period 92/06/01 to 93/05/31			6. Acft/Sys UH-60A			
Flight Cond Sym	FLYING DUTY SYMBOL										k. Total This Sheet	l. From Sheet No. 5	m. Total	
	a. CP/ CE	b. PI/ OR	c. PC/ AO	d. UT/ MO	e. IP/ FE	f. IE/ FI	g. SP/ SI	h. MP	i. ME	j. XP				
7. D				3.0								3.0	120.1	123.1
8. N														
9. HO/ H														
10. W														
11. NG														
12.														
13. NS														
14. DG/ DS														
15. TR														
16. AA														
17. Total This Sheet				3.0								3.0	XXXXX XXXXX XXXXX XXXXX	XXXXXXXXX XXXXXXXXX XXXXXXXXX XXXXXXXXX
18. From Sheet No. 5				120.1								XXXX XXXX XXXX XXXX	120.1	XXXXXXXXX XXXXXXXXX XXXXXXXXX XXXXXXXXX
19. Total				123.1								XXXX XXXX XXXX	XXXXXX XXXXXX XXXXXX	123.1
20. Combat														
21. Immi- nent Danger														

DA FORM 759-1, Apr 98

Figure 7-23. Sample aircraft closeout summary (Flight Surgeon) (Illustration 2)

INDIVIDUAL FLIGHT RECORDS AND CERTIFICATE -- ARMY For use of this form, see AR 95-1 and FM 1-300; the proponent agency is ODCSOPS.														
AIRCRAFT CLOSEOUT SUMMARY												1. Sheet No. 10		
2. Name Smith, Jonathan P.				3. Rank SSG		4. SSN 211-98-5188		5. Period 92/08/01 to 93/06/25			6. Acft/Sys CH-47C			
Flight Cond Sym	FLYING DUTY SYMBOL										k. Total This Sheet	l. From Sheet No. 9	m. Total	
	a. CP/ CE	b. PI/ OR	c. PC/ AO	d. UT/ MO	e. IP/ FE	f. IE/ FI	g. SP/ SI	h. MP	i. ME	j. XP				
7. D					1.0							1.0	46.7	47.7
8. N														
9. HO/ H														
10. W														
11. NG													33.6	33.6
12.														
13. NS														
14. DG/ DS														
15. TR														
16. AA														
17. Total This Sheet					1.0							1.0	XXXXX XXXXX XXXXX XXXXX	XXXXXXXXX XXXXXXXXX XXXXXXXXX XXXXXXXXX
18. From Sheet No. 5					65.1	15.2						XXXX XXXX XXXX XXXX	80.3	XXXXXXXXX XXXXXXXXX XXXXXXXXX XXXXXXXXX
19. Total					66.1	15.2						XXXX XXXX XXXX XXXX	XXXXXX XXXXXX XXXXXX XXXXXX	81.3
20. Combat														
21. Immi- nent Danger														

DA FORM 759-1, Apr 98

Figure 7-24. Sample aircraft closeout summary (Flight Engineer Instructor)

INDIVIDUAL FLIGHT RECORDS AND CERTIFICATE -- ARMY For use of this form, see AR 95-1 and FM 1-300; the proponent agency is ODCSOPS.														
AIRCRAFT CLOSEOUT SUMMARY												1. Sheet No. 12		
2. Name Kuhn, Peter W.			3. Rank SFC		4. SSN 226-59-4801		5. Period 93/01/01 to 93/12/31			6. Acft/Sys UH-1H				
Flight Cond Sym	FLYING DUTY SYMBOL										k. Total This Sheet	l. From Sheet No. 11	m. Total	
	a. CP/ CE	b. PI/ OR	c. PC/ AO	d. UT/ MO	e. IP/ FE	f. IE/ FI	g. SP/ SI	h. MP	i. ME	j. XP				
7. D													170.9	170.9
8. N														
9. HO/ H														
10. W														
11. NG													96.1	96.1
12.														
13. NS														
14. DG/ DS														
15. TR														
16. AA														
17. Total This Sheet													XXXXX XXXXX XXXXX XXXXX	XXXXXXXXX XXXXXXXXX XXXXXXXXX XXXXXXXXX
18. From Sheet No. 5	201.9	65.1										XXXXX XXXXX XXXXX XXXXX	267.0	XXXXXXXXX XXXXXXXXX XXXXXXXXX XXXXXXXXX
19. Total	201.9	65.1										XXXXX XXXXX XXXXX	XXXXX XXXXX XXXXX	267.0
20. Combat														
21. Immi- nent Danger														

DA FORM 759-1, Apr 98

Figure 7-25. Sample aircraft closeout summary (Platoon Sergeant)

7–15. DA FORM 759 CLOSEOUT

Prepare a DA Form 759 when closing flight records of all individuals on flying status. Detailed instructions for completing DA Form 759 are in Table 7–9. At closeout, flight record forms are arranged in the DA Form 3513 IFRF as shown in Figure 7–3. Examples of completed DA Forms 759 are shown in Figures 7–26 through 7–33.

a. The DA Form 759 contains four parts; all parts must be completed. All entries must be typed. The DA Form 759 must be signed by the individual's unit commander to be considered valid. If the individual is a commander, his superior must verify and sign the flight records.

b. Standard remarks used to complete Part IV of DA Form 759 are give in Table 7–10.

c. Table 7–11 shows the service component designations for Part I, block 9.

Table 7–9. Instructions for completing DA Form 759

ITEM	INSTRUCTIONS
PART I. BIO/DEMOGRAPHIC	
Block 1	Enter the sheet number.
Block 2	Enter the last name, first name, and middle initial.
Block 3	Enter the rank.
Block 4	Enter the Social Security Number (SSN).
Block 5	Enter the period covered (yy/mm/dd – yy/mm/dd). (Example: June 3, 1996 would be 96/06/03.)
Block 6	Enter the date of birth.
Block 7	Enter the aviation service entry date. (This is the date that the aviator received his initial aeronautical certification orders or certificate of completion and aviator wings.) or (For nonrated crewmember, enter the date individual was awarded designated aeronautical badge.)
Block 8	Enter the branch of service.
Block 9	Enter the component designation, as shown in Table 7–11.
Block 10	Enter the unit of assignment.
Block 11	Enter the duty military occupational specialty (MOS). The duty MOS may be obtained from the unit Personnel and Administration Center (PAC) or modification table of organization and equipment/table of distribution and allowances (MTOE/TDA). Also DA Pam 600–3 lists commissioned officer MOSs and DA Pam 600–11 lists MOSs for warrant officers.

Table 7-9. Instructions for completing DA Form 759—continued

ITEM	INSTRUCTIONS
Block 12	Enter the assigned duty position.
Block 13	Aviators and flight surgeons only: Indicate whether the individual is in an operational or a nonoperational flying duty position (Yes or No). If yes, place date assigned to that position in block. Nonrated crewmembers: Do not use Yes or No in Block 13. Only enter the effective date of unit orders placing the individual on flight status. This date changes each time the individual is reassigned.
PART II. FLIGHT HOURS SECTION A. QUALIFICATIONS Column a Aircraft. The specific DOD aircraft in which the individual is qualified to operate (regardless of whether the individual currently flies) will be listed by mission, type, design, and series. For nonrated crewmembers, enter the aircraft in which the individual is qualified to perform his duty position. For each aircraft in which the individual has logged time while using a night vision device (NVD) or system (NVS), enter NS on the line directly below the aircraft entry in which the NVD or NVS time was logged. NOTE: Aircraft removed from the Army inventory will no longer be tracked by airframe on DA Form 759. Hours accumulated in that aircraft will be transferred into either military fixed-wing (FW) or military rotary-wing (RW) time as applicable. Hours are not to be placed into historical time. Compatible Flight Simulator. List, in the same order as the aircraft, the compatible flight simulator that the individual has flown. (AR 95-1 lists the compatible flight simulators.) NOTE: The aircrew training manuals may require individual to record flight time according to their crew-designated station. For example, separate entries must be made for AH-64 aircraft and flight simulator seat designations. (FS, BS) Other Flight Simulators. List any other flight simulators the individual has flown that are not compatible with the aircraft operated. Other Aircraft. Any aircraft flown in which the individual is not qualified to operate and for which a DA Form 759-1 has been completed will be listed following the Other Flight Simulators category. This time will be listed as "RW" for rotary wing or "FW" for fixed wing.	

Table 7–9. Instructions for completing DA Form 759—continued

ITEM	INSTRUCTIONS
Column b	For rated crewmembers: Transcribe, from the previous DA Form 759 closeout, the date (dd,mm,yy) (example: 01 Jun 96) that the aviator qualified in the aircraft and/or NVDs or NVS listed. Also enter the date of any new qualifications and a corresponding comment in Part IV. For nonrated crewmembers: Enter the date the individual qualified to perform his duty position or was progressed to RL1. This date reflects the first time the nonrated crewmember attained RL1 in a particular aircraft. For flight surgeons: This date will reflect the date when the flight surgeon was placed on aviation service orders by The Surgeon General (TSG); Cdr, US Army Personnel Center (ARPERCEN); or Chief, National Guard Bureau (CNGB). This action will enable automated flight record system (AFRS) to differentiate aircraft. Additional information can be found in AR 600–105. NOTE: The dates for new aircraft and NVD or NVS qualification are obtained from the aviator's aircrew training record.
Column c	Enter the date (dd,mm,yy) that the individual completed his most recent flight in the aircraft and the NVD or NVS used (information taken from the DA Form 759–2 for rated crewmember and DA Form 759–3 for nonrated crewmember).
Column d	Aircraft (in which qualified). Enter the total hours flown from line 19, column m, of each DA Form 759–1 on the line that corresponds to the aircraft flown. NS. Enter the total hours flown from lines 11 through 13, column m, of each DA Form 759–1 on the line that corresponds to the NVD or NVS used. (The totals under NS tell the commander that, of the total hours flown in an aircraft, this many NVDs or NVS hours have been flown. These hours will not be included when the total number of flight hours are calculated for the period.) Compatible Flight Simulator. Enter the total hours flown from line 19, column m, of each DA Form 759–1 on the line that corresponds to the flight simulator flown. Other Aircraft. Add from DA Form 759–2 any hours flown in an aircraft the individual is not qualified in to the RW or FW time (Part II, Column a) of the previous DA Form 759. Enter the total hours flown. Note: When the aviator is qualified in the aircraft, hours previously logged in the flight records under FW or RW will be subtracted from that category at the next closeout and entered as indicated above as a qualified aircraft.

Table 7-9. Instructions for completing DA Form 759—continued

ITEM	INSTRUCTIONS
Columns e through n	Enter the total hours flown from line 19, columns a through j, of each DA Form 759-1 in the blocks that correspond to the duty position and aircraft or flight simulator flown.
SECTION B. TOTAL HOURS NOTE: Section B is a compilation of total aircraft time and does not include flight simulator time. NS time is already a part of each respective airframe's total hours. NS time from Part II, Section A, column d is not added to obtain total hours. Blocks in Section B are updated at each closeout of the individual's flight records. Block c and e are updated only after the operations officer has verified the individual's civilian flight hours. Block g, "Historical Hours," is never updated and always remains the same. Block a Enter the cumulative totals of combat hours flown from all DA Forms 759-1. (The total in this block will be updated each closeout only if combat time was flown during the period covered.) Block b Enter the cumulative totals of imminent danger hours flown from all DA Forms 759-1. (The total in this block will be updated each closeout only if imminent danger time was flown during the period covered.) Blocks c and e Verify the total flight hours from civilian logbooks. Add these hours to the total entered on the previous DA Form 759. Explain the verification and the change in hours in Part IV. Block d Add all military rotary-wing aircraft totals in Section A, column d, and enter the total in this block. Do not include NS time. Block f Add all military fixed-wing aircraft totals in Section A, and enter the total in this block. Do not include NS time. Block g Transcribe the historical hours from the previous DA Form 759 closeout to this block. Do not update these hours. Block h Add the hours in blocks c through g to get the cumulative military and civilian flight hours. Enter the total in hours and tenths of hours in this block. Page 2, DA Form 759, Blocks 1-5 Transcribe information from Part I, blocks 1-5 to this section.	

Table 7–9. Instructions for completing DA Form 759—continued

ITEM	INSTRUCTIONS
PART III. AIRCREW TRAINING PROGRAM (ATP) Note: ATP requirements include hours, tasks, and iterations identified in the appropriate aircrew training manuals, readiness level progression, and the APART. Failure of an individual to complete any portion of the ATP requires a comment in Part IV. Placement of any ATP extensions or other documents in the Supplemental Documents section of the IFRF is optional for information retrieval during closeouts or other actions.	
Block 1	<i>For rated aviators only:</i> Enter Flight Activity Category. Note: TC 1–210 defines the three flight activity categories.
Block 2	<i>For maintenance test pilots (MP, ME):</i> Enter the date of the maintenance test pilot's flight evaluation/re-evaluation.
Block 3	Enter the date of the most recent flight physical. If the individual is on a 30-day extension, use the date from the previous DA Form 759 and make the appropriate remark in Part IV. On the next closeout, annotate in Part IV when the flight physical was completed. The physical examination is an annual requirement according to AR 95–1 and is not considered part of the APART.
Blocks 4 and 5	Enter date from previous DA Form 759, otherwise leave blank. (If blocks are blank, research into the aviators records may provide the information to complete them.)
Block 6	Enter the date that the individual completed all APART requirements. (This will be the latest date that corresponds to the standardization flight evaluation (Blk 9), instrument evaluation (Blk 10), or –10 test, which is not shown on the reverse of DA Form 759.)
NOTE: If the individual fails to successfully complete the APART, leave block 6 blank and enter the appropriate comment in Part IV.	
Block 8	Enter the appropriate readiness level for the individual's primary aircraft.
Block 9	Enter the date of the most recent standardization flight evaluation for the individual's primary aircraft, when applicable.
Block 10	Enter the date of the most recent instrument evaluation for the individual's primary aircraft.
Block 11	Enter the individual's alternate aircraft if designated. (For example, if the aviator's primary and additional aircraft are rotary wing, his alternate aircraft would be fixed wing if he were rated in both fixed- and rotary-wing aircraft. If not, leave this block blank.)

Table 7-9. Instructions for completing DA Form 759—continued

ITEM	INSTRUCTIONS
Block 12	Enter the appropriate readiness level for the individual's alternate aircraft.
Block 13	Enter the date of the most recent standardization flight evaluation for the individual's alternate aircraft.
Block 14	Enter the date of the most recent instrument evaluation for the aviator's alternate aircraft.
Block 15	Enter the individual's additional aircraft if designated.
Block 16	Enter the appropriate readiness level for the individual's additional aircraft.
Block 17	Enter the date of the most recent standardization flight evaluation for the individual's additional aircraft.
NOTE: If the individual has more than one alternate or additional aircraft designated, list second and subsequent entries, if any, in Part IV in the same format as the corresponding categories in Part III.	
PART IV. REMARKS Enter a historical narrative of the individual's flying status, qualifications, and proficiency if they are not stated elsewhere on the form. Use the remarks in Table 7-9 to ensure consistency. Commander's signature and date The individual's commander must sign and date the form to certify the accuracy of the closeout data. If the individual is a commander, his superior must verify and sign the flight records. NOTE: <i>National Guard Only.</i> Commander's designated representative may sign the Commander's block.	

Table 7–10. Examples of standard remarks

1. Records closed (date) (reason).
 2. Individual is temporarily suspended from flying duty from (date) to (date) because of (reason). (This usually is used to explain temporary medical grounding but may be used for other reasons.)
 3. Entries for tracking flying time:
 - a. Rated aviator – Aviator has completed (total) months operational flying duty.

NOTE: Aviator's total operational flying duty credit (TOFDC) can be verified by requesting a copy of his order through the unit PAC.

 - b. Nonrated crewmember – Individual has completed (total) months flying duty.
 4. Individual completed (type (example: ANVIS–6)) night vision goggles (NVG) training on (date).
 5. Qualified in (mission, type, design, and series) aircraft on (date).
 6. Individual has successfully completed the US Navy Underwater Egress 9D5A Device Training conducted at (location) on (date).
 7. Aviator awarded senior or master aviator badge under provisions of (UP) . . . (authority), (date).
 8. Individual awarded senior or master crewmember badge UP (authority), (date).
 9. Error sheet (sheet #), Part (part #), Col. (col #), (aircraft affected) is incorrect. Reads "(say what is incorrect)," should read "(enter corrected data)," corrected this sheet.
 10. Logging of combat or imminent danger time is authorized UP (authority), (date).
- Note: This remark will only be used when adjustments to combat (C) or imminent danger (D) time have been made for the closeout period.**
11. Individual reassigned UP (issuing authority) orders number ____, dated _____. Reassigned to (unit and station).
 12. Medical waiver granted effective (date) for (summarize medical condition waived).
 13. Individual must wear corrective lenses when performing as a crewmember.
 14. Individual has/has not completed ATP requirements. (Explain what ATP requirements have not been completed and the actions that have been taken. Use one of the remarks below.)

Table 7-10. Example of standard remarks—continued

NOTE: When an individual completes or fails to complete ATP requirements, use one of the remarks below for Part IV of the next DA Form 759 closeout.

- a. Individual granted a 30-day extension to complete (list all ATP requirements still to be completed) (effective (date)).
- b. Waiver for (specified ATP requirement or requirements) requested on (date).
- c. Individual completed previous ATP requirements on (date).
- d. Previous ATP requirements waived by (MACOM) commander on (date).
- e. Aviator placed before a flying evaluation board for (reason) on (date). State determination of board.
- f. Aviator failed to complete ATP requirements within the additional timeframe. Aviator suspended from aviation service pending results from the flight evaluation board.
- g. Individual failed to complete ATP requirements within the additional timeframe.
- h. Individual removed from flight status effective (date). Individual designated flight activity category (FAC) 3 per TC 1-210 effective (date).
- 15. Suspension from flying duty (date) UP (authority) for (purpose).
- 16. Completed, disqualified from, or relieved from (type of aviation course) on (date).
- 17. Violation of (regulation) on (date). (Briefly describe the violation and the action taken.)
- 18. Involved in (Class A, B, or C) accident on (date) in (type of aircraft) as (pilot duty station).

NOTE: If the accident classification is upgraded or downgraded, an entry will be made on the next closeout to reflect the change.

- 19. 120-day notice for removal from flight status given on (date).
- 20. Crewmember has completed Aircrew Coordination Training (ACT) on (date) according to US Army Aviation Center (USAAVNC) Aircrew Coordination Exportable Training Package.

NOTE: When a standard remark applies to a closeout, that remark becomes mandatory. If a situation arises that is not explained in a standard remark, it will be explained in easy-to-understand language.

- 21. 30-day extension granted for completion of flight physical on (date).

Table 7–11. Service component category codes

CODE	COMPONENT	CODE	COMPONENT
RA	Regular Army	CIV	Civilian employed by contractor for flying duty in Army aircraft under a specific contract.
USAR	United States Army Reserve		
ARNG	Army National Guard	FGN	Foreign military student or rated pilot.
DA	Department of the Army Civilian employed for flying in military aircraft.	OTHER	All other components

INDIVIDUAL FLIGHT RECORD AND FLIGHT CERTIFICATE — ARMY For use of this form, see AR 95–1 and FM 1–300; the proponent agency is ODCSOPS													
PART I. BIO/DEMOGRAPHIC											1. Sheet No. 35		
2. Name Foster, Kenneth B.				3. Rank CW3							4. SSN 421–81–7347		
5. Period 92/06/01 to 93/05/31			6. DOB 18 May 58		7. ASED 04 Dec 82			8.Branch AV		9. Component RA			
10. Unit D Co., 2d Bn, 229th Avn, Fort Rucker, AL 36362											11. DMOS 152F		
12. Duty Position AH–64 Pilot							13. Operational Position Yes 15 Mar 91						
PART II. FLIGHT HOURS SECTION A. QUALIFICATIONS													
a.	b.	c.	d.	e.	f.	g.	h.	i.	j.	k.	l.	m.	n.
Acft System	Date Qual	Last Flight	Total Time	CP/ CE	PI/ OR	PC/ AO	UT/ MO	IP/ FE	IE/ FI	SP/ SI	MP	ME	XP
UH–60A	01 Feb 87	01 Sep 92	147.8		40.7	60.9	18.2	19.0	9.0				
NS	01 Feb 87	01 Sep 92	32.1										
AH–64A(BS)	01 Mar 91	01 Apr 93	96.3		64.4	31.9							
NS	01 Mar 91	01 Apr 93	20.5										
2B–40BS			45.0		17.0	24.5			3.5				
SECTION B. TOTAL HOURS													
a. Combat			b. Imminent Danger			c. Civilian RW 48.0			d. Military RW 244.1				
e. Civilian FW 96.0			f. Military FW			g. Historical Hours 1252.0			h. Total Hours 1640.1				

DA FORM 759, Apr 98

Figure 7–26. Sample DA Form 759 closeout (Rated Crewmember) (Illustration 1)

INDIVIDUAL FLIGHT RECORD AND FLIGHT CERTIFICATE — ARMY For use of this form, see AR 95-1 and FM 1-300; the proponent agency is ODCSOPS.					1. Sheet No. 35	
2. Name Foster, Kenneth B.		3. Rank CW3		4. SSN 421-81-7347		5. Period: 92/06/01 to 93/05/31
PART III. ATP						
1. FAC 1	2. MTFE	3. Phys Exam 06 Mar 93	4. Ejection Seat	5. Alt Chamber 05 Apr 83	6. APART Completed 08 Mar 93	
7. Primary Acft AH-64 (BS)		8. RL 1	9. Std Flt Eval 02 MAR 93		10. Inst Eval 08 MAR 93	
11. Alternate Acft		12. RL	13. Std Flt Eval		14. Inst Eval	
15. Additional Acft UH-60A		16. RL 1	17. Std Flt Eval 23 SEP 92			
PART IV. REMARKS						
RECORDS CLOSED 31 MAY 93 FOR ANNUAL CLOSEOUT. AVIATOR HAS COMPLETED ATP REQUIREMENTS. LOGGING OF IMMINENT DANGER AND COMBAT TIME IS AUTHORIZED UP FORSCOM MESSAGE DTD 010300Z NOV 92. ERROR SHEET 34, PART II, SECTION A, BLOCK B, LINES 3 AND 4 (AH-64(BS) ARE INCORRECT. READS "01 FEB 91," SHOULD READ "01 MAR 91." CORRECTED THIS SHEET. OPERATIONS OFFICER VERIFIED 40 CIVILIAN FIXED-WING HOURS. HOURS LOGGED BETWEEN 02 JUN 92 AND 15 OCT 92 WITH THE SCREAMING EAGLES FLYING CLUB.						
Commander's Typed Name, Rank, Branch CALVIN N. HOBBS CPT, AV, COMMANDING			Signature		Date	
DATA REQUIRED BY THE PRIVACY ACT OF 1974						
1. AUTHORITY:		Section 301,5 U.S.C.; Section 3013, 10 U.S.C.; E.O. 9397.				
2. PURPOSE:		To record the flying experience and qualification data of each aviator, crew member, noncrew-member, and flight surgeon in aviation service.				
3. ROUTINE USE:		DA Forms 759, 759-1, and 759-3 (Individual Flight Record and Flight Certificate-Army); DA Form 4186 (Medical Recommendation for Flying Duty); and DA Form 4187 (Personnel Action) requesting routine aeronautical actions may be disclosed to the Federal Aviation Administration, the National Transportation Safety Board, or official aircraft accident investigation teams upon request.				
4. DISCLOSURE:		Disclosure of the SSN for the aviator, crew member, noncrew-member, or flight surgeon is voluntary. However failure to provide the information requested may result in an unnecessary delay when processing personnel actions.				

DA FORM 759 (BACK), Apr 98

Figure 7-27. Sample DA Form 759 closeout (Rated Crewmember) (Illustration 2)

[illegible]

DA FORM 759, Apr 98

Figure 7–28. Sample DA Form 759 closeout (Flight Surgeon) (Illustration I)

INDIVIDUAL FLIGHT RECORD AND FLIGHT CERTIFICATE — ARMY For use of this form, see AR 95-1 and FM 1-300; the proponent agency is ODCSOPS.				1. Sheet No. 6	
2. Name Baron, Redmon T.		3. Rank MAJ	4. SSN 547-66-8091		5. Period: 92/06/01 to 93/05/31
PART III. ATP					
1. FAC	2. MTFE	3. Phys Exam 18 May 93	4. Ejection Seat	5. Alt Chamber	6. APART Completed
7. Primary Acft		8. RL	9. Std Flt Eval		10. Inst Eval
11. Alternate Acft		12. RL	13. Std Flt Eval		14. Inst Eval
15. Additional Acft		16. RL	17. Std Flt Eval		
PART IV. REMARKS					
INDIVIDUAL HAS COMPLETED 53 MONTHS OF FLYING DUTY. RECORDS CLOSED 31 MAY 93 FOR ANNUAL BIRTH MONTH CLOSEOUT.					
Commander's Typed Name, Rank, Branch CHARLES R. BROWN MAJ, AV, COMMANDING			Signature		Date
DATA REQUIRED BY THE PRIVACY ACT OF 1974					
1. AUTHORITY:		Section 301,5 U.S.C.; Section 3013, 10 U.S.C.; E.O. 9397.			
2. PURPOSE:		To record the flying experience and qualification data of each aviator, crew member, noncrew-member, and flight surgeon in aviation service.			
3. ROUTINE USE:		DA Forms 759, 759-1, and 759-3 (Individual Flight Record and Flight Certificate-Army); DA Form 4186 (Medical Recommendation for Flying Duty); and DA Form 4187 (Personnel Action) requesting routine aeronautical actions may be disclosed to the Federal Aviation Administration, the National Transportation Safety Board, or official aircraft accident investigation teams upon request.			
4. DISCLOSURE:		Disclosure of the SSN for the aviator, crew member, noncrew-member, or flight surgeon is voluntary. However failure to provide the information requested may result in an unnecessary delay when processing personnel actions.			

DA FORM 759 (BACK), Apr 98

Figure 7-29. Sample DA Form 759 closeout (Flight Surgeon) (Illustration 2)

[illegible]

DA FORM 759, Apr 98

Figure 7–30. Sample DA Form 759 (Flight Engineer Instructor) (Illustration 1)

INDIVIDUAL FLIGHT RECORD AND FLIGHT CERTIFICATE — ARMY					1. Sheet No.
For use of this form, see AR 95-1 and FM 1-300; the proponent agency is ODCSOPS.					6
2. Name Baron, Redmon T.		3. Rank MAJ		4. SSN 547-66-8091	5. Period: 92/06/01 to 93/05/31
PART III. ATP					
1. FAC	2. MTFE	3. Phys Exam 22 Jun 93	4. Ejection Seat	5. Alt Chamber	6. APART Completed 15 May 93
7. Primary Acft CH-47C		8. RL 1	9. Std Flt Eval 15 May 93		10. Inst Eval
11. Alternate Acft		12. RL	13. Std Flt Eval		14. Inst Eval
15. Additional Acft		16. RL	17. Std Flt Eval		
PART IV. REMARKS					
RECORDS CLOSED 30 JUN 93 FOR BIRTH MONTH CLOSEOUT. INDIVIDUAL HAS COMPLETED 88 MONTHS OF FLYING DUTY. INDIVIDUAL HAS COMPLETED ALL ATP REQUIREMENTS. LOGGING OF IMMINENT DANGER AND COMBAT TIME IS AUTHORIZED UP FORSCOM MESSAGE DTD 020905Z SEP 92					
Commander's Typed Name, Rank, Branch STEVEN P. CHIPMAN MAJ, AV, COMMANDING			Signature		Date
DATA REQUIRED BY THE PRIVACY ACT OF 1974					
1. AUTHORITY:		Section 301,5 U.S.C.; Section 3013, 10 U.S.C.; E.O. 9397.			
2. PURPOSE:		To record the flying experience and qualification data of each aviator, crew member, noncrew-member, and flight surgeon in aviation service.			
3. ROUTINE USE:		DA Forms 759, 759-1, and 759-3 (Individual Flight Record and Flight Certificate-Army); DA Form 4186 (Medical Recommendation for Flying Duty); and DA Form 4187 (Personnel Action) requesting routine aeronautical actions may be disclosed to the Federal Aviation Administration, the National Transportation Safety Board, or official aircraft accident investigation teams upon request.			
4. DISCLOSURE:		Disclosure of the SSN for the aviator, crew member, noncrew-member, or flight surgeon is voluntary. However failure to provide the information requested may result in an unnecessary delay when processing personnel actions.			

DA FORM 759 (BACK), Apr 98

Figure 7-31. Sample DA Form 759 (Flight Engineer Instructor) (Illustration 2)

[illegible]

DA FORM 759, Apr 98

Figure 7-32. Sample DA Form 759 (Platoon Sergeant) (Illustration 1)

INDIVIDUAL FLIGHT RECORD AND FLIGHT CERTIFICATE — ARMY For use of this form, see AR 95-1 and FM 1-300; the proponent agency is ODCSOPS.				1. Sheet No. 12	
2. Name Kuhn, Peter W.		3. Rank SFC		4. SSN 226-59-4801	
5. Period: 93/01/01 to 93/06/30					
PART III. ATP					
1. FAC		2. MTFE		3. Phys Exam 25 Jun 93	
4. Ejection Seat		5. Alt Chamber		6. APART Completed 15 Jan 93	
7. Primary Acft UH-1H		8. RL 1		9. Std Flt Eval 15 JAN 93	
10. Inst Eval		11. Alternate Acft		12. RL	
13. Std Flt Eval		14. Inst Eval		15. Additional Acft	
16. RL		17. Std Flt Eval			
PART IV. REMARKS					
INDIVIDUAL PLACED ON FLYING STATUS UP HQDA ORDERS NO. 245-12, DTD 15 DEC 92. EFFECTIVE 01 JAN 93. RECORDS CLOSED 30 JUN 93 FOR ANNUAL BIRTH MONTH CLOSEOUT. INDIVIDUAL HAS COMPLETED 118 MONTHS OF FLYING DUTY. INDIVIDUAL HAS COMPLETED ALL ATP REQUIREMENTS.					
Commander's Typed Name, Bank, Branch EVELYN R. OSBORNE CPT, AV, COMMANDING			Signature		Date
DATA REQUIRED BY THE PRIVACY ACT OF 1974					
1. AUTHORITY: Section 301,5 U.S.C.; Section 3013, 10 U.S.C.; E.O. 9397. 2. PURPOSE: To record the flying experience and qualification data of each aviator, crew member, noncrew-member, and flight surgeon in aviation service. 3. ROUTINE USE: DA Forms 759, 759-1, and 759-3 (Individual Flight Record and Flight Certificate-Army); DA Form 4186 (Medical Recommendation for Flying Duty); and DA Form 4187 (Personnel Action) requesting routine aeronautical actions may be disclosed to the Federal Aviation Administration, the National Transportation Safety Board, or official aircraft accident investigation teams upon request. 4. DISCLOSURE: Disclosure of the SSN for the aviator, crew member, noncrew-member, or flight surgeon is voluntary. However failure to provide the information requested may result in an unnecessary delay when processing personnel actions.					

DA FORM 759(BACK), Apr 98

Figure 7-33. Sample DA Form 759 (Platoon Sergeant) (Illustration 2)

7-16. AUTOMATED FLIGHT RECORDS SYSTEM (AFRS)

a. AFRS Support. This section contains instructions for installing AFRS Version 4.1 on your computer. A copy of the program or any suggested improvements should be coordinated through the AFRS office. The AFRS office is located at Fort Rucker, AL The mailing address is US Army Aviation Center, Directorate of Combat Developments, ATTN: ATZQ-CDL, Fort Rucker, AL 36362, Telephone: DSN 558-9304; Commercial 205-255-9304.

b. Installation: Preparing your Computer for Installation of AFRS.

(1) Before installing AFRS on your computer, several things need to be examined. Check your computer to ensure that it has the following:

- (2) Disk operating system (DOS) 5.0 or higher.
- (3) 4 megabytes (M) of random access memory (RAM).
- (4) Dot matrix or Laser Jet printer.
- (5) A 3 1/2-inch floppy disk drive.
- (6) CONFIG.SYS file consisting of a minimum of: FILES=35, BUFFERS=25.
- (7) At least 4.0 M free on your hard disk drive.

NOTE: AFRS MAY NOT OPERATE PROPERLY ON A LAN COMPUTER NETWORK. INSTALLATION AND ENTERING THE PROGRAM MUST BE DONE FROM THE DOS PROMPT FOR PROPER OPERATION OF THE AFRS SYSTEM..

- (8) A personal computer using a 386 processor or higher to run AFRS Version 4.1.

c. Installing AFRS on Your Computer.

(1) Insert the AFRS program disk in the 3 1/2-inch drive. Change directory to the assigned directory of your 3 1/2-inch drive, type **V41**, and press the ENTER key. This will start the installation process.

- (2) A menu will appear on the screen with three options:

- (a) **Option A:** Install AFRS for the first time.
- (b) **Option B:** Convert Version 4.0 to Version 4.1.
- (c) **Option Q:** Quit return to DOS.

(3) Choose Option A if you are installing AFRS for the first time. This option will unzip the files and create a directory, FR759V41. This option copies the necessary files from the diskette to operate the AFRS program.

(4) Choose Option B if you have Version 4.0 and want to convert your files to Version 4.1. This option also will create a directory, FR759V41, and copy the necessary files to operate the AFRS program. All master files in the FR759V40 directory will be copied automatically to the FR759V41 directory. After you have Version 4.1 running and have verified that all data is correct, you can delete all files from the FR759V40 directory. **DO NOT** do this until you have verified that Version 4.1 is correct. Recommend you back up all Version 4.0 files before installation in case you encounter any problems installing Version 4.1.

(5) Choose Option Q if you wish to exit to DOS without installing the AFRS Version 4.1 program.

(6) You can convert up only one version at a time. (Example: Version 4.1 will convert only Version 4.0). If you need further assistance, please contact the AFRS office.

(7) You are now ready to enter the program for the first time. To start AFRS from the C:\> prompt, type 759V41, and press ENTER. If you installed over Version 4.0, your password is the same; if you are a first-time user, the password is **SUPERFL**.

(8) From the main menu, select option H (PROGRAM SETUP MENU). From the Setup Menu, select Option G (PRINT PROCEDURES MANUAL). Make sure a printer is connected and turned on.

(9) Read the procedures manual and then continue your setup of Version 4.1. Contact the help line for additional assistance.

7–17. MASTER FILES

a. The AFRS can be used by one or by several units at the same location. Unit identification codes are used to differentiate the units. The data in the AFRS master files is supplied from information on previous closeouts and data entries from DA Form 2408–12. Information in the master files can be reviewed by using the program's QUERY option or by printing any of the optional reports. Flight hours in the AFRS are maintained to the nearest tenth of an hour.

b. Frequent backups of your master data files are a must. At a minimum, a backup should be made at the end of the day when new data is entered. Only blank, formatted disks should be any backups, and the backup disks should be dated.

Appendix A**Airfield Management**

Airfield management comprises the total airfield environment and everything that happens within it. This appendix includes a list of airfield management considerations—which are not all-inclusive—in Table A-1. The US Army Aeronautical Services Agency, ATTN: MOAS-AI, 9325 Gunston Rd., Fort Belvoir, VA 22060-5582, provided this information.

Table A-1. Airfield management considerations

1. Mission requirements.
2. Site selection.
3. Property acquisition.
4. Equipment authorization, installation, and maintenance.
5. Cost guidance.
6. Ammunition and firearms.
 - a. Storage.
 - b. Transport.
 - c. Loading and unloading.
7. SOP and facility memorandums.
 - a. Joint-use facilities.
 - b. Host-tenant agreements and support.
8. Airfield inspections and surveys.
 - a. Self-inspection procedures and checklists.
 - b. Periodic inspections and surveys.
9. Claims for or against the Army.
10. Airfield certification.
11. Files and publications.

Table A–1. Airfield management considerations—continued

12. Passenger support facilities.
 - a. VIP.
 - b. Customs and immigration.
13. Electronic and visual navigation aids.
 - a. Doppler reference points.
 - b. Compass rose establishment and maintenance.
14. Disaster operations.
15. Clubs.
 - a. Sports parachute.
 - b. Flying.
 - c. Model airplane.
16. Community relations.
 - a. Activities such as fairs and sports events.
 - b. Protest and/or hostile public demonstrations.
 - c. Public affairs information releases.
 - d. Displays and demonstrations.
17. Cargo handling.
18. Foreign object damage prevention program.
19. Fire prevention and protection.
20. Weather service.
21. Hurricane evacuation and other severe weather procedures.
22. Hazards.
 - a. Birds.
 - b. Balloons and kites.

Table AB1. Airfield management considerations—continued

- c. Temporary obstructions and construction/rep air operations.
- 23. Department of the Army Regional Representatives.
- 24. Radio frequencies.
 - a. Hazardous electromagnetic radiation ordnance conditions (no radio/radar transmission areas).
 - b. Airfield (non–ATC) communications net.
- 25. Traffic patterns.
- 26. Local flying rules and areas.
- 27. Flight routes.
- 28. Instrument approaches and departures.
- 29. Flight inspection and evaluation.
- 30. Airspace actions.
- 31. Flight violations and operational hazard reports.
- 32. Notices to Airmen.
- 33. Flight information publications
- 34. Marking and lighting.
- 35. Field notices.
- 36. FAA notice requirements.
- 37. Civilian aircraft landing permits.
- 38. Noise complaint and abatement procedures.
- 39. Paved areas.
- 40. Parking and mooring.
- 41. Airfield surface movement conditions validation and reporting
 - a. Official vehicles.
 - b. Nongovernmental.

Table A–1. Airfield management considerations—continued

42. Security.
 - a. Restricted areas (access and control).
 - b. Intrusion alarm and prevention measures.
 - c. Bomb threat plan.
 - d. Antiterrorist plan.
 - e. Antihijack plan.
43. Air traffic and airspace interface.
44. FAA interface.
45. Crash, fire, and rescue.
 - a. Crash, fire, and rescue equipment.
 - b. Contingency plans and local community agreements.
 - c. Search and rescue coordinator designation.
 - d. Crash alarm and communications circuit.
46. Environment.
 - a. Environmental integrity plan.
 - b. Natural resources management.
47. Airfield waivers.
48. Fuel storage areas and equipment.
 - a. Aircraft servicing.
 - b. Fuel dispensing.
 - c. Fuel spillage.
49. Flight planning.
 - a. Facilities.
 - b. Aircrew briefing/lounge area.

Table AB1. Airfield management considerations—continued

- c. Service B requirements (acquisition/closure actions).
 - d. Alternative to Service B.
- 50. Unmanned aerial vehicle operations.
- 51. Encroachment procedures.
- 52. High-intensity radio frequency.
- 53. Automated air facilities information file.
- 54. Airfield organization.
- 55. Airfield modernization plan.

Appendix B

Facility Memorandum, Operations Letter, and Letter of Agreement

A facility memorandum is used to disseminate information within the Army. It is not an official means of communication for agencies outside the Army, however. This appendix shows a sample facility memorandum (Figure B-1), an operations letter (Figure B-2), and a letter of agreement (Figure B-3). When more than one airfield must agree to a policy or procedure, a letter of agreement is used.

ATZQ-DET-O (MARKS NUMBER)	DATE																					
MEMORANDUM FOR Army Radar Approach Control (ARAC) Personnel																						
SUBJECT: Temporary Approach Minimums																						
1. Runway 6, Cairns Army Airfield (AAF), is closed for resurfacing. It should reopen 7 February 1998. When the runway is reopened, it will have to cure for about 2 weeks before runway markings can be repainted on it. 2. During the time that the runway is usable without all runway markings, the visibility minimums for instrument approaches will be as follows: <table style="width: 100%; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;"><u>Approach</u></th> <th style="text-align: center;"><u>Visibility (miles)</u></th> <th style="text-align: center;"><u>Category</u></th> </tr> </thead> <tbody> <tr> <td>Nondirectional radio beacon (NDB) Runway 6</td> <td style="text-align: center;">1</td> <td style="text-align: center;">A, B, C</td> </tr> <tr> <td>Instrument landing system (ILS) Runway 6</td> <td style="text-align: center;">3/4</td> <td style="text-align: center;">A, B, C</td> </tr> <tr> <td>Localizer (LOC) Runway 6</td> <td style="text-align: center;">1</td> <td style="text-align: center;">A, B, C</td> </tr> <tr> <td>VHF omnidirectional radio range (VOR) Runway 6</td> <td style="text-align: center;">1</td> <td style="text-align: center;">A, B, C</td> </tr> <tr> <td>Precision approach radar (PAR) Runway 6</td> <td style="text-align: center;">3/4</td> <td style="text-align: center;">A, B, C</td> </tr> <tr> <td>Airport surveillance radar (ASR) Runway 6</td> <td style="text-align: center;">1</td> <td style="text-align: center;">A, B, C</td> </tr> </tbody> </table> 3. A notice to airmen (NOTAM) will be issued at the appropriate time.		<u>Approach</u>	<u>Visibility (miles)</u>	<u>Category</u>	Nondirectional radio beacon (NDB) Runway 6	1	A, B, C	Instrument landing system (ILS) Runway 6	3/4	A, B, C	Localizer (LOC) Runway 6	1	A, B, C	VHF omnidirectional radio range (VOR) Runway 6	1	A, B, C	Precision approach radar (PAR) Runway 6	3/4	A, B, C	Airport surveillance radar (ASR) Runway 6	1	A, B, C
<u>Approach</u>	<u>Visibility (miles)</u>	<u>Category</u>																				
Nondirectional radio beacon (NDB) Runway 6	1	A, B, C																				
Instrument landing system (ILS) Runway 6	3/4	A, B, C																				
Localizer (LOC) Runway 6	1	A, B, C																				
VHF omnidirectional radio range (VOR) Runway 6	1	A, B, C																				
Precision approach radar (PAR) Runway 6	3/4	A, B, C																				
Airport surveillance radar (ASR) Runway 6	1	A, B, C																				
 Chief, ARAC Division																						

Figure B-1. Sample facility memorandum

B-2

OFFICE SYMBOL	DATE
SUBJECT: Approach Control/Ground-Controlled Approach (GCA) Letter of Agreement	
Letter of agreement between _____ Approach Control and _____ GCA. (Name) (Name)	
_____ (Name)	
Approach Control Letter Number _____ (Name)	
_____ (Name)	
GCA Letter Number _____ (Name)	
SUBJECT: Radar Control of Instrument Flight Rules (IFR) Arrivals at _____ Airfield	
EFFECTIVE: (Effective date of letter and number and date of canceled letters)	
This agreement governs the control of IFR arrivals at _____ Airfield.	
1. Conventional aircraft (primary and secondary fixes). 2. Jet aircraft (procedures for release to GCA during published instrument approaches). 3. Diverse approach. 4. Missed approach. 5. Coordination (transfer of information between facilities).	
Attachments (list as required)	
_____ (Signature)	_____ (Signature)
_____ Commander (Name) Airfield	_____ Commander (Name) Airfield
_____ (Signature)	_____ (Signature)
_____ Commander (Name) Airfield	_____ Commander (Name) Airfield

Figure B-3. Sample letter of agreement

Appendix C

Emergency Plans and Procedures

Each Army airfield is required to publish, maintain, and periodically test its emergency plans. The plans should provide sufficient guidance to reduce the probability of personnel injury and property damage on the airfield should an actual emergency occur. This appendix discusses emergency plans, the pre-accident plan, and the National Search and Rescue Plan.

C-1. EMERGENCY PLANS

a. *Personnel Responsibilities.*

(1) *Airfield commander.* The airfield commander—

(a) Coordinates the emergency plan with law enforcement personnel, rescue and fire fighting personnel, medical personnel, principal airfield tenants, and other personnel who have responsibilities under the plan.

(b) Conducts a full-scale exercise of the emergency plan at least every 5 years.

(2) *Operations officer.* The operations officer—

(a) Ensures the participation of all personnel listed in (1)(a) above.

(b) Ensures that all airfield personnel having responsibilities under the plan are familiar with their assignments and are properly trained.

(c) Rehearses and reviews the adequacy of the unit pre-accident plan quarterly.

b. *Contents.*

(1) *Response Instructions.* The emergency plan contains instructions for responding to—

(a) Aircraft accidents and incidents.

(b) Bomb incidents, including designated parking areas for the aircraft involved.

(c) Structural fires.

(d) Natural disasters.

(e) Radiological incidents.

(f) Sabotage, hijack incidents, and other unlawful interference with airfield operations.

(g) Power failure for movement area lighting.

(h) Water rescue situations.

- (i) Fuel spills.

(2) Notification procedures. The emergency plan includes procedures for notifying appropriate personnel about—

- (a) The location of the emergency.

- (b) The number of personnel involved in the emergency.

(c) Other information they will need to carry out their responsibilities as soon as that information is available.

(3) Medical/emergency provisions. The emergency plan must—

(a) Provide for medical services for the maximum number of persons that can be carried on the largest aircraft that the airfield reasonably can be expected to serve.

(b) Provide the name, location, telephone number, and emergency capability of each medical facility and the business address and telephone number of medical personnel who have agreed to provide medical services.

(c) Provide the name, location, and telephone number of each rescue squad, ambulance service, and government agency that has agreed to provide medical services.

(d) Include provisions for inventorying surface vehicles and aircraft that are available to transport injured and deceased persons to locations on the airfield and in the communities it serves.

(e) Identify hangars or other buildings that can be used to accommodate uninjured, injured, and deceased persons.

(4) Related emergency functions. The emergency plan must provide for—

- (a) Crash alarm systems.

- (b) Removal of disabled aircraft.

- (c) Coordination of airfield and control tower functions relating to emergency actions.

(d) Marshaling, transportation, and care of uninjured and ambulatory injured accident survivors.

(5) Water rescue provisions. The emergency plan should provide for the rescue of aircraft accident victims from significant bodies of water or marshlands that are crossed by aircraft.

(6) Crowd control. The emergency plan specifies the name and location of each safety or security agency that has agreed to provide assistance for crowd control in case of an emergency on the airfield.

(7) Disabled aircraft removal. The emergency plan includes the names, locations, and telephone numbers of personnel who have aircraft removal responsibilities.

CB2. PREACCIDENT PLAN

a. Contents.

(1) The pre-accident plan must include a crash alarm system, a crash rescue plan, and a means of notifying board members who will investigate the accident to include the flight surgeon. (AR 385-95 discusses the crash rescue plan in detail.)

(2) An appointed accident investigation board should be readily available as part of the pre-accident plan. This board is comprised of members who meet the requirements in AR 385-40.

(3) Units operating as tenant activities from non-Army or joint-use airfields ensure plans are developed to fulfill Army requirements that are not provided by the host activity. Tenant activity plans are coordinated to ensure interface with host pre-accident plans.

(4) All operations personnel must be familiar with the pre-accident plan and know what to do if an accident occurs. Pre-accident preparation requires a daily test of the primary and secondary crash alarm systems and a quarterly test of the pre-accident plan. Table C-1 shows sample primary and secondary crash alarm systems.

(5) Accident board members are trained and equipped to deal with composite and blood born hazards. (The risk management process should accomplish this.)

b. Details. The pre-accident plan is coordinated with all commanders and appropriate personnel. Emergency personnel must be familiar with the crash alarm system and the pertinent provisions of AR 385-40 and AR 385-95. All responsible personnel must be ready to respond to an emergency at any time.

(1) An air crash, search, and rescue map of the local area is provided to and maintained by each activity listed for the primary crash alarm systems.

(2) Wreckage is not disturbed or moved except for purposes of rescue and/or firefighting until released by the president of the aircraft accident investigation board. DA Pam 385-40 contains guidance on the preservation of wreckage.

C-3. NATIONAL SEARCH AND RESCUE PLAN

Search and rescue are a lifesaving service provided by the federal agencies signatory to the National Search and Rescue Plan and agencies responsible for search and rescue within each state. Operational resources are provided by the United States Coast Guard (USCG); Department of Defense (DOD) components; Civil Air Patrol; Coast Guard auxiliary; state, county, and local law enforcement and other public safety agencies; and private volunteer organizations.

Table C–1. Sample primary and secondary crash alarm system

1. Primary crash alarm system	Alternate phone number
Flight operations will	000–0000
Air traffic control tower will	000–0000
Crash fire station will	000–0000
Supporting ground medical unit will	000–0000
Supporting air evacuation unit will	000–0000
Special crash rescue crew will	000–0000
2. Secondary crash alarm system	
Airfield or post fire department will	000–0000
Flight surgeon or assistant will	000–0000
Provost marshall will	000–0000
Aviation maintenance officer will	000–0000
Aviation safety officer will	000–0000
Transportation/motor officer will	000–0000
Post signal officer will	000–0000
Public affairs officer will	000–0000
Post staff adjutant general will	000–0000
Post facility engineer will	000–0000
Aircraft accident investigation board will	000–0000
Airfield weather officer will	000–0000
Aviation officer will	000–0000

a. Responsibilities.

(1) The National Search and Rescue Plan—by federal interagency agreement—provides for the effective use of all available facilities in all types of SAR missions. These facilities include aircraft, vessels, pararescue and ground rescue teams, and emergency radio fixing. The USCG coordinates SAR in the maritime region, and the US Air Force (USAF) coordinates SAR in the inland region. To carry out their SAR responsibilities, the USCG and the USAF have established rescue coordination centers to direct SAR activities within their respective regions. During aircraft emergencies, distress and urgency information normally is sent to an appropriate rescue coordination center (RCC) through an air route traffic control center (ARTCC) or flight service station (FSS).

(2) The departure station is responsible for SAR action until it receives notification from the destination station of the transfer of SAR responsibility.

(3) When an aircraft has crashed or is suspected of having crashed within a unit's area of responsibility, operations personnel plot the location of the crash site on their map. They notify the RCC or the joint rescue coordination center (JRCC). They also relay all information about the crash so that the nearest unit to the crash site can provide support. As updated information is received about the crash, they notify the RCC or JRCC again to ensure that all equipment and personnel involved are accounted for. As information is received, it should be logged and used by safety personnel to prepare DA Form 2397–10–R, which is required by AR 385–40. A mission commander should be designated to conduct any SAR effort. Selection of a mission commander is based on the

anticipated size and proximity of the search area and the tactical situation. FM 90-18 contains information about Army combat search and rescue (CSAR) operations.

b. Overdue Aircraft Actions.

(1) On a flight plan. An aircraft on a VFR or defense visual flight rule (DVFR) flight plan is considered overdue when it fails to arrive 30 minutes after its ETA and communications cannot be established or it cannot be located.

(2) Not on a flight plan. An aircraft not on a flight plan is considered overdue at the time a reliable source reports it to be at least 1 hour late at the destination. When the report is received, operations personnel try to verify that the aircraft actually departed and that the request is for a missing aircraft rather than for a person. Missing person reports are referred to the appropriate authorities.

c. QALQ (Information Request to Departure Station) Messages.

(1) The destination station sends a QALQ message over Service B by asking, "Has a certain aircraft landed?" The response to a QALQ message is a QAL message. The QAL response indicates whether an aircraft has landed at a certain location.

(2) When a VFR aircraft (military or civilian) becomes overdue, the destination station (including the intermediate destination tie-in station for military aircraft) will try to locate the aircraft by checking all adjacent flight plan area airports. Appropriate terminal area facilities and ARTCC sectors also are checked. If the communications search does not locate the aircraft, the destination station will send the signal "QALQ" to the departure station and, when different, to the FSS with which the flight plan was filed. Personnel may make long-distance telephone calls, when appropriate, to accomplish SAR responsibilities. Table CB2 shows a sample QALQ message.

Table C-2. Sample QALQ message

/B FF KMEMYF (DTG) KSPSYF QALQ N 12345.

(3) Upon receipt of the QALQ, the departure station checks locally for any information about the aircraft. It also will take the following actions:

(a) If the aircraft is located, the departure station sends the destination station a message such as the one shown in Table C-3.

Table C-3. Sample QAL message

/B FF KMEMYF (DTG) KSPSYF QALQ R12345 QAL 1255.

(b) If the departure station is unable to obtain additional information, it will send a message, such as the one shown in Table C–4, to the destination station. The departure station will use the following format when sending the message:

- ! Aircraft identification and type.
- ! True airspeed.
- ! Departure time.
- ! Departure point.
- ! Initial altitude.
- ! Flight route.
- ! Destination.
- ! Fuel exhaustion time.
- ! Name and address of pilot.
- ! Number of personnel on board.
- ! Color of aircraft.
- ! Any verbal or written remarks made by the pilot or crew that may assist in the search.

Table C–4. Sample QALQ message with additional information

/B FF KSPSYS (DTG) KMEMYF QALQ R12345 CB12 TAS 110 D1235 MGM BHM FLEXHA 1635 MAJ JOHN DOE USAAVNC OZR 2 POB OLIVE DRAB.

(4) Upon receipt of a QALQ message from the destination station about a flight for which a departure message was sent, the station that sent the proposed flight plan immediately sends a message to the destination station. The message contains all information not previously sent. No further search action is required of the station that sent the proposed flight plan. Also, no further messages is received by that station unless the search area extends into its flight plan area.

(5) If the destination station locates the aircraft after the QALQ is sent, it sends a cancellation message to all recipients of the QALQ. Table C–5 shows a sample QALQ cancellation message.

Table C-5. Sample QALQ cancellation message

/B FF KMEMYF (DTG) KSPSYF QALQ R12345 CNLD.
--

d. Information Requests.

(1) If the reply to the QALQ is negative or the aircraft has not been located within 30 minutes after it becomes overdue, the destination tie-in FSS sends a numbered information request (INREQ). The INREQ is sent to the departure station, flight watch control stations with communication outlets along the route, other FSSs along the route, ARTCCs along the route, and the RCC.

NOTE: When the aircraft reaches INREQ status, the tie-in FSS assumes control. The flight operations provides assistance as necessary.

(2) If the stations are within 50 miles of the Great Lakes, the INREQ also is sent to the Cleveland FSS. For the Pacific, Hawaii stations provide preliminary notification to the Honolulu SARCC as follows:

! Hilo by long-distance telephone.

! Honolulu FSS by local telephone.

! Secondary means for Hilo by Service B to the Honolulu FSS and the SARCC.

(3) All information that will assist with the search will be included in the INREQ. Table C-6 shows a sample INREQ message.

Table C-6. Sample INREQ message

/B DD (appropriate six-character identifier and KRCCYC) DHN001 (appropriate three-character identifiers) INREQ R12345 UHB60 TAS 100 D1230 OZR DR RRS V521 MAI RB199 PARER DR PAM FLEXHA 1430 PILOT MAJ JOHN DOE USAAVNC 6 POB OLIVE DRAB (any other information available).
--

(4) The RCC does not have a transmit capability. Therefore, it cannot acknowledge messages.

(5) En route stations that receive an INREQ seek information about the aircraft by checking all flight plan area airports along the proposed flight route. They send the information to associated terminal area facilities and reply to the INREQ within 1 hour. Adjacent flight plan area airports included in the communications search conduct a local field search to determine if the aircraft landed at their facilities. If an en route station is unable to complete the search within 1 hour, it will send a

status report, followed by a final report when the search is completed. If the reply contains pertinent information (for example, aircraft location or position report), the en route station will send the information to the originator by a numbered message and activate the printers of all INREQ addressees.

(6) A departure station that receives an INREQ will hold it in suspense.

(7) When an addressee, the Cleveland FSS notifies the Cleveland USCG RCC. Hawaiian stations notifies the Honolulu SARCC by telephone. Table C–7 shows sample INREQ negative reports.

(8) When the aircraft is located, the INREQ originator sends a numbered cancellation message to all INREQ addressees. The message includes the location of the aircraft. Associated terminal area facilities also are notified. Table C–8 shows a sample INREQ cancellation message.

Table C–7. Sample INREQ negative reports

/B DD KLOUYF INREQ R12345 NEG INFO. or /B DD (appropriate six-letter identifiers and KRCCYC) (DTG) KHUFYF HUF007 (appropriate three-character identifier) INREQ R12345 OVR HUF 1355 NO OTHER INFO.

Table C–8. Sample INREQ cancellation message

/B DD (appropriate six-character identifiers, to include KRCCYF) (DTG) KLOUYF LOU003 (appropriate three-character identifier) INREQ R12345 CNLD LCTD BMG.
--

e. Alert Notices (ALNOTs).

(1) If replies to the INREQ are negative or if the aircraft is not located by the time of its calculated fuel exhaustion—whichever occurs first—the destination tie-in FSS sends an ALNOT. ALNOTs are addressed to all Service B circuits that serve the ALNOT search area, to the RCC, and to the regional operations center. If the search area is within 50 miles of the Great Lakes, the Cleveland FSS also is sent an ALNOT. (The Cleveland FSS notifies the Cleveland RCC.)

(2) The search area is normally the area that extends 50 miles on either side of the proposed route of flight from the aircraft's last reported position to the destination. However, if requested by the RCC or at the discretion of the destination station, the ALNOT may be expanded to include the maximum range of the aircraft.

NOTE: Automated FSSs require specific addressing.

(3) Messages to Alaska are addressed to PANCYG. (Only FSSs in the ALNOT search area are required to acknowledge.)

(4) All information that assists with the search is included in the ALNOT. (The information is the same as for an INREQ plus other information received.) Table C-9 shows a sample ALNOT.

Table C-9. Sample ALNOT

/B SS (appropriate ARTCC circuit codes and other addressees identified in (2) above, to include the KRCCYC) (DTG) KORLYF ALNOT R12345 UH-60 TAS 90 D1840 DCA 85 DR IRK IVR RNT 2005 FLEXHA 2310 PILOT MAJ JOHN DOE USAAVNC 5 POB OLIVE DRAB (any other information available).

(5) Ten minutes after the ALNOT is issued, the destination tie-in FSS calls Scott Air Force Base (AFB) RCC to confirm receipt of the ALNOT and to answer any inquiries.

(6) Upon receipt of an ALNOT, each station whose flight plan area extends into the ALNOT search area immediately conducts a communications search of those flight plan area airports that could accommodate the aircraft and that were not checked during the INREQ search. The station sends the results to associated terminal area facilities. They also request appropriate law enforcement agencies to check airports that cannot otherwise be contacted.

(7) Within 1 hour after receipt of the ALNOT, the originator is notified of the results or status of the communications search. If the reply contains pertinent information (for example, aircraft location), it is sent to the originator by a numbered message and the printers of all ALNOT addressees are activated. Table C-10 shows a sample ALNOT reply message.

(8) Search assistance is requested from aircraft operating in the search area. If the overdue aircraft is equipped with an emergency locator transmitter (ELT), aircraft are requested to monitor 121.5 megahertz (MHz). The phraseology is as follows: "Aircraft is equipped with emergency locator transmitter. All aircraft are requested to listen on 121.5 MHz for beacon transmitter."

Table C-10. Sample ALNOT reply message

/B SS (appropriate ARTCC circuit codes and other addressees identified in (2) above (DTG) KJAXYF JAX004 (appropriate three-character identifier) ALNOT R12345 ACFT LCTD OG JAX.
--

(9) The ALNOT remains current until the aircraft is located or the search is suspended by the RCC. The originator of the ALNOT then sends a cancellation message to all recipients of the ALNOT. Each facility notifies all previously alerted facilities and agencies of the cancellation. Table C-11 shows a sample ALNOT cancellation message.

Table C–11. Sample ALNOT cancellation message

/B
 SS (appropriate ARTCC circuit codes and other addressees identified in (2) above, to include the KRCCYC)
 (DTG) KORLYF
 ALNOT R12345 CNLD ACFT LCTD JAX.

f. Overdue Aircraft Flight Information.

(1) When an aircraft is reported overdue, flight dispatch personnel provide information about the aircraft to the departure FSS. Most of the required information can be taken from the flight plan and sent exactly as it appears on the plan. However, the fuel exhaustion time is not on the flight plan; it must be calculated before the data is transmitted. When all the required information is known, it is sent to the departure FSS in the proper sequence.

(2) The fuel exhaustion time is the time—in hours and minutes—when the aircraft will run out of fuel. To calculate the fuel exhaustion time, flight dispatch personnel first determine the exact time that the aircraft departed its last known location (airfield). The dispatcher can do this by using Service F or Service B communications. The departure time from the aircraft's last known location is noted; the fuel on board is added for that leg of the flight (i.e., the fuel exhaustion time for that leg of the flight.) This is done for each leg of the flight until the aircraft reaches its final destination.

(a) **Initial fuel exhaustion time.** An aircraft departs Montgomery at 1215 with 2 hours of fuel on board. This amount of fuel enables the aircraft to fly for 2 hours or until 1415. This is the initial fuel exhaustion time.

(b) **Subsequent leg fuel exhaustion time.** If the aircraft lands at Crestview without refueling, the flight time from Montgomery to Crestview is calculated and subtracted from the fuel on board at departure from Montgomery. For example, an aircraft on a local flight plan departs Montgomery at 1215 and arrives at Crestview at 1315. (This means that 1 hour of fuel has been used.) If the aircraft departs Crestview at 1345, the new fuel exhaustion time is calculated at 1445.

g. Rescue Coordination Centers. Table CB12 shows the telephone numbers of USCG rescue coordination centers. Table CB13 shows the telephone numbers of the USAF RCC for the 48 contiguous states, which is in Scott AFB, Illinois. Table CB14 shows the telephone numbers of the Alaskan Air NG rescue coordination center—which is in Elmendorf AFB, Alaska. Table CB15 shows the telephone numbers of the JRCC—which is in Honolulu, Hawaii.

Table C–12. USCG rescue coordination centers

Boston, Massachusetts (617) 223–8555	Alameda, California (415) 437–3700
Portsmouth, Virginia (757) 398–6231	Seattle, Washington (206) 220–7001
Miami, Florida (305) 536–5611	Juneau, Alaska (907) 463–2001
New Orleans, Louisiana 504-589–6225	Honolulu, Hawaii (808) 531–1112/1507
Cleveland, Ohio (216) 902–6117	San Juan, Puerto Rico (809) 722–2943

Table C-13. USAF rescue coordination center

Commercial	(757) 764B8112
WATS	(800) 851B3051
DSN	574B8112

Table C-14. Alaskan Air NG rescue coordination center

Commercial	(907) 428-7230	DSN	(317) 384-6726
------------	----------------	-----	----------------

Table C-15. Honolulu joint rescue coordination center

Commercial	(808) 531-1112/1507
DSN	(315) 448-6665/6666

h. Pilot Responsibility.

(1) ARTCCs and FSSs alert the SAR facilities when information is received from any source that an aircraft is in difficulty, overdue, or missing. A filed flight plan is the most timely and effective indicator that an aircraft is overdue. Flight plan information is invaluable to SAR forces for the planning and execution of search activities.

(2) Before departing on a flight, local or otherwise, the pilot advises someone at the departure point of his destination and flight route, if it is not direct. Search efforts are often wasted and rescue is often delayed because pilots thoughtlessly take off without telling anyone where they are going.

(3) The life expectancy of an injured survivor decreases as much as 80 percent during the first 24 hours. The chance of survival for uninjured personnel rapidly diminishes after the first 3 days.

i. Hazardous Area Search and Rescue Services. When lake, island, mountain, or swamp reporting service has been established and a pilot requests the service, contact is made every 10 minutes—or at designated position checkpoints—with the aircraft while it is crossing a hazardous area. If contact with the aircraft is lost for more than 15 minutes, SAR facilities are alerted.

NOTE: Hazardous area reporting service and chart depictions are published in the AIM, basic flight information publications, and local ATC publications.

j. Search and Rescue Protection. Military and civilian pilots are required to file VFR flight plan with the airfield base operations or at an FAA FSS. For maximum protection, the pilot should file only to the point of first intended landing and refile for each leg to the final destination. When a lengthy flight plan is filed with several stops en route and an ETE to the final destination, a mishap could occur on any leg of the flight. Unless other information is received, a search will be initiated only after 30 minutes have elapsed after the aircraft's ETA at the final destination.

NOTE: The AIM contains more information about the emergency services available to pilots.

k. *Emergency Locator Transmitters.*

(1) ELTs are battery operated and emit a distinctive downward swept audio tone on 121.5 MHz and 243.0 MHz. When "armed" and subjected to crash-generated forces, they are designed to automatically activate and continuously emit these signals. ELTs will operate continuously for at least 48 hours over a wide temperature range. A properly installed and maintained ELT can expedite search and rescue activities.

(2) FAR, Part 91, authorizes the operational ground testing of ELTs during the first 5 minutes of each hour. If operational tests must be conducted outside this time frame, coordination must be made with the base operations or the control tower. Tests should be no longer than three audible sweeps.

(3) Caution should be exercised to prevent the inadvertent activation of ELTs in the air or while ELTs are being handled on the ground. Accidental or unauthorized activation will generate an emergency signal that cannot be distinguished from the real thing, leading to expensive and frustrating searches. The AIM and FAA Handbook 7110.10 contain additional information on emergency locator transmitters.

Appendix D

Flight Information Publications and Related Aeronautical Products

Aircrews must have current flight information publications to operate safely and according to Army regulations. However, it is not Army policy to provide each aviator with his own set of flight information publications (FLIPs). Also, the Department of Defense (DOD) cannot afford to provide every organization with worldwide coverage for contingency or deployment purposes. The quantities and selection of publications must be limited to that required to meet realistic mission needs. Procedures are available for unusual or short notice situations that require the use of additional flight information publications on an as-needed basis.

D–1. RESPONSIBILITIES OF THE FLIP ACCOUNT MANAGER

The operations element must ensure that required publications are available for use by aircrews. The publications must be available not only for normal, everyday operations but also for unusual situations to include deployments. The unit FLIP account manager function normally is assigned as an additional duty. To effectively perform this duty, the unit FLIP account manager must become familiar with AR 95–2; the Defense Mapping Agency (DMA) Catalog of Maps, Charts, and Related Products, Part 1 – Aerospace Products, Volume I; and the DOD FLIP General Planning (GP). If the FLIP account supports an air traffic control (ATC) unit, the account manager also must become familiar with FM 1–303.

D–2. DISTRIBUTION CYCLES

a. The distribution frequency for most FLIPs is based on a 56-day cycle. Some change notices to basic publications are issued every 28 days. However, some basic products are published every 4 weeks and others are only published every 32 weeks. Although the publication cycle for FLIPs is subject to change, it does not happen often. FLIP GP, Chapter 11, provides an easy-to-read, quick reference guide to the publication and distribution cycles for all FLIPs. Critical changes to FLIPs that require immediate distribution to the field are published in urgent change notices (UCNs). UCNs are published only as needed and are sent to account holders automatically.

b. United States sectionals (maps) and terminal area charts are scheduled for publication on an 180-day cycle. Other maps and charts may be published on different cycles. The FLIP account manager must know the scheduled effective date of products used by the unit. All publications should be received before their effective date. Shipment discrepancies, such as shortages, must be reported immediately to the appropriate automatic distribution (AD) account manager so that replacement publications can be sent as soon as possible. Direct contact with a National Imagery and Mapping Agency (NIMA) office is not authorized.

D–3. ESTABLISHMENT OF A FLIP ACCOUNT

a. The process used to establish a FLIP account is the same as that used to accomplish the required annual validation of an account. The following steps are used in the process:

(1) The organization's normal geographical area of operations is defined. This does not include scheduled or anticipated deployments to training areas such as the National Training Center (NTC). It refers only to the area where the unit routinely flies to accomplish its mission.

(2) Each section of the DMA catalog of aeronautical products is reviewed to identify the FLIP and FLIP–related products needed by the unit. The operations officer can assist in identifying the requirements. If classified publications are required, a statement by the unit's security manager that describes the classified storage level must accompany the request. Figure D–1 shows a sample of this memorandum.

DEPARTMENT OF THE ARMY 22d Aviation Regiment 2d Battalion Fort Rucker, Alabama 36362B5112	
ATZQ–AV (95–2)	28 September 1997
MEMORANDUM FOR Director, US Army Aeronautical Services Agency, ATTN: MOAS–AI, 9325 Gunston Rd., Fort Belvoir, VA 22060–5582	
SUBJECT: Classified Material Storage	
1. Our organization has the capability to store classified material up to and including SECRET.	
2. The POC is SFC Green, DSN: 558–1123/1124.	
FOR THE COMMANDER:	
JORGE W. RODRIGUEZ III MAJ, MI S2	

Figure D–1. Sample classified material storage memorandum

(3) The quantities of FLIP and FLIP–related products authorized are established according to the basis of issue (BOI) (Table 12–1 and Figures 12–1, 12–2, and 12–3) in AR 95–2. The BOI table and figures are calculated on the basis of these criteria:

(a) The number of operations/flight planning areas to be supported.

(b) The number of assigned instrument flight rules (IFR) and visual flight rules (VFR)–rated aircraft to be supported. Of these, the number of aircraft that require low–altitude and high–altitude products.

(c) The number of instrument flight examiners authorized.

(d) The number and type of ATC elements supported and the number of controllers assigned. (This regulation (FM 1-303) lists the publications required by each type of ATC facility.)

(e) The number of aviators authorized. (This number is used only to establish the requirement for flight information handbooks.)

(4) Once the requirements have been established by product and quantity, a memorandum is submitted to the appropriate AD account manager for review and approval. Figure D-2, which starts on the next page, shows a sample memorandum. All information required by AR 95-2 is included in the memorandum. Normally, the establishment of a new account should be forwarded to the AD account manager 90 to 120 days before activation of the FLIP account. Requested changes to established FLIP accounts also should follow this guidance, if possible. The AD manager can be contacted by telephone, message, or memorandum for assistance in establishing a FLIP account.

b. Once a FLIP account has been established, a printout will be received from the NIMA. The printout will list the unit's activity address code and the products required. Table D-1 (page D-6) shows a sample printout of FLIP products. The printout should be reviewed immediately to ensure that required products are listed and that the quantities are correct.

c. The NIMA reviews each account annually to revalidate FLIP and FLIP-related requirements. The same process described in a above is used to confirm or change requirements and quantities. AR 95-2 has detailed guidance on when and how to complete the survey.

D-4. ONE-TIME REQUESTS

a. One-time requests for FLIP and FLIP-related products should be submitted to the appropriate Army AD account manager in sufficient time to ensure the availability and receipt of the publications. Requests are submitted for additional publications at least 60 to 90 days before a unit's scheduled deployment. Figure D-3—on pages D-6 through D-9—shows a sample one-time request for FLIP products. Requests received within 30 days of a unit's deployment are considered emergency requests and should be avoided. Emergency requests are expensive and do not guarantee the availability of all publications in the time required.

b. The information listed below is provided to the appropriate AD account manager. It must be complete and accurate to ensure that the required publications are received as requested.

(1) The organization's activity address code.

(2) The date the organization requires the publications for mission planning.

(3) The scheduled deployment date and scheduled date of return to home station.

(4) The total number of aircraft deploying by type.

(5) A list of publications by DMA stock number and the quantities required. (Only those publications and quantities that are not already being received through automatic distribution are listed.)

(6) Point of contact with telephone numbers.

DEPARTMENT OF THE ARMY 22d Aviation Regiment 2d Battalion Fort Rucker, Alabama 36362–5112	
ATZQ–AV (95–2)	1 October 1997
MEMORANDUM FOR Director, US Army Aeronautical Services Agency, ATTN: MOAS–AI, 9325 Gunston Rd., Fort Belvoir, VA 22060–5582	
SUBJECT: Request to Establish a Flight Information Publication (FLIP) Automatic Distribution (AD) Account	
1. We request that a FLIP and FLIP–related products AD account be established for our organization.	
2. The following information is submitted according to AR 95–2:	
a. The POC is SFC Johnson, Commercial: (205) 255–1234/2345; DSN: 558–0011/0012.	
b. 22d Aviation Regiment, 2d Battalion ATTN: ATZQ–AV Fort Rucker, AL 36362–5112	
c. Two UH–60 Black Hawks, three OH–58D Kiowas, and eight AH–64 Apaches.	
d. Southeastern United States, Caribbean, and South America.	
e. Stock numbers and quantities are enclosed.	
f. The inability to pass publications from one crew position to the other in the AH–64 necessitates two sets of publications for each of our eight AH–64s.	
g. This organization's contingency mission may require deployment to foreign countries. Therefore, the security information in the Classified Supplement to the Foreign Clearance Guide is required to successfully accomplish our mission. A memorandum signed by our security officer is enclosed to verify our capability to store up to and including SECRET material.	
h. The overseas items requested are for contingency planning purposes only as the quantities requested indicate.	

Figure D–2. Sample request to establish a FLIP account

ATZQ-AV SUBJECT: Request to Establish a Flight Information Publication (FLIP) Automatic Distribution (AD) Account	
i. This account will support one tactical ATC tower and one tactical ground-controlled approach (GCA) with a total of 25 controllers assigned.	
j. We are authorized two instrument flight examiners and 28 aviators.	
3. Our organization will begin operations on or about 1 January 1998. We are requesting initial distribution and activation of our account not later than (NLT) 15 December 1997.	
FOR THE COMMANDER:	
Encls	WILLIAM T. THACKER MSG Operations NCOIC
2	

Figure D-2. Sample request to establish a FLIP account—continued

Table D-1. Sample FLIP products printout

PRODUCT	QUANTITY	PRODUCT	QUANTITY
CATP1VOL1	1	FAATP711010	3
CATP3VOL1	1	FAATP711065	8
CATP1CHUM	1		
		FAATP734001	2
TERPS MANUAL	1	FAATP735005	2
		FAATP740002	2
FAAIMALL	1		
FAAIMFLTINFO	4	FAATP820001	1
FAAIMNOTAM		FAATP826003	1
FCGXXNSA	1	FAFARPT065	2
FCGXXCSALL	1	FAFARPT091	1
		FAFARPT093	1
		FAFARPT105	1
OTHERS:			
AIRALMANAC	1		
TERPS	1		

SECTIONALS

	QUANTITY		QUANTITY
SECXXATLANTA	10	SECXXHOUSTON	10
SECXXBROWNSVILLE	10	SECXXJAXSONVILLE	45
SECXXCHARLOTTE	10	SECXXMEMPHIS	10
SECXXMIAMI	45	SECXXSANANTONIO	10
SECXXNEWORLEANS	2		

TERMINAL AREA CHARTS

	QUANTITY		QUANTITY
VFRTAATLANTA	10	VFRTANEWO	10
VFRTAMIAMI	45	VFRTATAMPORLAND	45

Table D-1. Sample FLIP products printout—continued

*HELICOPTER CHART		
	QUANTITY	
HELOGULFUSVFR	45	
		AID
	QUANTITY	
PLANNING		
PLANXGP	5	
PLANXAP1SET	5	
PLANXAP1	5	
PLANXAP1A	5	
PLANXAP1B	5	
PLANXAP1BBOOK	5	
PLANXAP1BCHTS	5	
PLANXWPIVUS	2	
ENRXXFLTIHBK	32	
		AID
		QUANTITY
CARIBBEAN AND SOUTH AMERICA		
ENRXXCSALSET		2
ENRXXCSALCHT01		
ENRXXCSALCHT03		2
ENRXXCSALCHT05		2
ENRXXCSALCHT07		2
ENRXXCSALCHT09		2
ENRXXCSALCHT11		2
ENRXXCSALCHT13		2
ENRXXCSALCHT15		2
ENRXXCSALCHT17		2
ENRXXCSLA1		2
ENRXXCSASUP		2
ENRXXCSAHLIAP		2

Table D–1. Sample FLIP products printout—continued

	AID	QUANTITY
UNITED STATES		
ENRXXUSLET		5
ENRSSUXLSCHT01		5
ENRSSUSLCHT01		5
ENRXXUSLCHT03		5
ENRXXUSLCHT05		5
ENRXXUSLCHT07		5
ENRXXUSLCHT09		5
ENRXXUSLCHT11		5
ENRXXUSLCHT13		10
ENRXXUSLCHT15		10
ENRXXUSLCHT17		25
ENRXXUSLCHT19		25
ENRXXUSLCHT21		0
ENRXXUSLCHT23		5
ENRXXUSLCHT25		5
ENRXXUSLCHT27		10
ENRXXUSLCHTAA1		25
ENRXXUSIFRSP		25
ENRXXUSVFRSP		25
TERMXXSIDSTARE		5
TERMXXSIDSTARW		2
TERMXUSLIAP		3
TERMXUSLIAPV01		3
TERMXUSLIAPV02		3
TERMXUSLIAPV03		3
TERMXUSLIAPV04		3
TERMXUSLIAPV05		3
TERMXUSLIAPV06		3
TERMXUSLIAPV07		3
TERMXUSLIAPV08		3
TERMXUSLIAPV09		3
TERMXUSLIAPV10		3
TERMXUSLIAPV11		25
TERMXUSLIAPV12		25
TERMUSLIAPT		25

Table D-1. Sample FLIP products printout—continued

NOS PRODUCTS	AID	QUANTITY
ENRXXAFDUSNE		1
ENRXXAFDUSSE		3
ENRXXAFDUSEC		1
ENRXXAFDUSNC		1
ENRXXAFDUSSC		1
ENRXXAFDUSNW		1
ENRXXAFDUSSW		1

DEPARTMENT OF THE ARMY 22d Aviation Regiment, 2d Battalion Fort Rucker, Alabama 36362–5112	
ATZQ–AV (95–2)	6 January 1998
MEMORANDUM FOR Director, US Army Aeronautical Services Agency, ATTN: MOAS–AI, 9325 Gunston Rd., Fort Belvoir, VA 22060–5582	
SUBJECT: One–Time Request for Flight Information Publication (FLIP) Products	
1. We request that a one–time shipment of FLIP products arrive at our location NLT 8 March 1998 for mission planning. The following information is provided:	
a. Our account number is AC1234.	
b. We will be self–deploying one UH–60 Black Hawk, two OH–58D Kiowas, and six AH–64 Apaches on 15 March 1998 with a scheduled redeployment date of 21 April 1998.	
c. In addition to what we are already receiving, we need the publications and quantities listed below.	
<u>Defense Mapping Agency Stock Number</u>	<u>Quantity</u>
SECXXMEMPHIS	9
SECXXDALLASFTW	16
SECXXATLANTA	9
SECXXNEWORLEANS	9
ENRXXUSLCHT13	9
TERMXUSLIAPV05	16
2. The POC is SFC Johnson, Commercial: (205) 255–1234/2345; DSN:558–0011/0012.	
FOR THE COMMANDER:	
WILLIAM T. THACKER MSG Operations NCOIC	

Figure D–3. Sample one–time request for FLIP products

Appendix E

Position Responsibility Transfer

The transfer of position responsibility will be accomplished according to this appendix and the appropriate facility directives. This appendix describes the step-by-step process for conducting a position-relief briefing and transferring position responsibility from one specialist to another.

E-1. DISCUSSION

a. The increase in traffic density and the need to move air traffic quickly without compromising safety makes the position-relief process vitally important. The contents, methods, and practices used to conduct the position relief and position-relief briefing vary among personnel; therefore, pertinent information is often forgotten or incomplete. Major problems occur when personnel rely on memory rather than established routines or systematic reminders.

b. Position relief increases the workload of specialists at the time the relief is conducted. The intent of this appendix is to make the process of transferring position responsibility and information smooth and complete. The method described takes advantage of a self-briefing concept. To begin the relief process, the relieving specialist obtains needed information from the status information areas. Up-to-the-minute flight service information requires the specialists to communicate verbally during the relief process. This method also specifies the time when the transfer of position responsibility will occur.

E-2. TERMS

The terms used in this appendix are defined as follows:

a. Status Information Areas—manual or automatic displays of the current status of position-related equipment and operational conditions or procedures.

b. Written Notes—manually recorded items of information about the position of operation that are kept at designated locations (an element of status information areas).

c. Checklist—an ordered listing of items covered during a position relief.

E-3. PRECAUTIONS

Specialists involved in the position-relief process should not rush or be influenced to rush. During the position operation, each item of status information that is or may be an operational factor for the relieving specialist should be recorded as soon as possible. Extra care should be taken when more than one specialist relieves or is relieved from a position at the same time.

E-4. RESPONSIBILITIES

a. The specialist being relieved is responsible for ensuring that any pertinent status information of which he is aware is relayed to the relieving specialist. He must ensure that this

information is accurately displayed in the status information areas for which he has responsibility or that it is relayed to the position responsible for accurately displaying it.

b. Before the relieving specialist accepts responsibility for the position, he must ensure that all problems pertaining to the operation of the position are resolved. The relieving specialist and the specialist being relieved share equal responsibility for the completeness and accuracy of the position–relief briefing. The specialists engaged in a position relief will conduct the relief process at the position being relieved unless other procedures have been established and authorized by the facility air traffic manager.

E–5. POSITION RELIEF PROCESS

a. Position Review. The relieving specialist—

(1) Follows the checklist and reviews the status information areas. (This step may be replaced by an authorized pre–position briefing if an equivalent review of the checklist items is completed.)

(2) Observes the position equipment, the operational situation, and the work environment.

(3) Listens to voice communications and observes other operational actions.

(4) Observes current and pending aircraft and vehicular traffic and correlates that information with flight and other movement information.

(5) Indicates to the specialist being relieved that the position has been previewed and that the verbal briefing may begin.

b. Verbal Briefing. The specialist being relieved will brief the relieving specialist about the status of items not displayed in the status information areas. He also will brief the relieving specialist about any items of special interest that require a verbal explanation or an additional discussion. The specialist being relieved will brief the relieving specialist about the traffic, if applicable. The relieving specialist may ask questions to ensure a complete understanding of the situation, and the specialist being relieved must provide complete answers to these questions.

c. Position Responsibility Assumption. The relieving specialist will make a statement or otherwise indicate to the specialist being relieved that position responsibility has been assumed. Then the specialist being relieved will release the position to the relieving specialist.

(1) **Relieving specialist.** The relieving specialist—

(a) Signs the position on unless a facility directive authorizes the specialist being relieved to perform this function.

(b) Checks, verifies, and updates the information obtained in a and b above.

(2) **Specialist being relieved.** The specialist being relieved—

(a) Reviews the checklist, status information areas, written notes, and other sources of information and advises the relieving specialist of known omissions, updates, or inaccuracies.

- (b)** Observes the overall position operation to determine if assistance is needed.
- (c)** Provides or summons assistance, if needed.
- (d)** Advises the appropriate position regarding known status information area omissions, updates, or inaccuracies.
- (e)** Signs the relieving specialist on the position, if appropriate.
- (f)** Signs the position off according to existing directives or otherwise indicates that the relief process is complete.

Appendix F

Service B System

The Service B system connects military base operations to the host air route traffic control center (ARTCC). Personnel prepare Service B messages on the display screen. They may transmit the messages or use the tape unit to prepare the messages and then transmit them from the display screen. Appendix F outlines the procedures for Service B messages (Table F-1) and shows examples of Service B messages (Table F-2).

Table F-1. Procedures for Service B messages

1. Listing of Service B Message Elements.

- a. /B (start of Service B message command).
- b. NEW LINE
- c. Two-character precedence identifier: SS, DD, FF, or GG.
- d. SPACE.
- e. International Civil Aviation Organization (ICAO) routing identifier or identifiers for each addressee.
- f. NEW LINE.
- g. Six-character, date-time group (for example, 041035).
- h. SPACE.
- i. ICAO routing indicator of originator.
- j. NEW LINE.
- k. Message data in proper format.

2. Preparing and Sending a Service B Message to Aeronautical Fixed Telecommunications Network (AFTN) from Cathode Ray Tube (CRT) (Without Tape Unit).

- a. Be sure light in ONBLINK key of CRT is off.
- b. Be sure Tape Unit switch is on LINE.
- c. Depress CTRL and CLEAR keys at the same time to clear the screen.
- d. Prepare flight plan, beginning with /B command.

Table F–1. Procedures for Service B messages—continued

- e. Use keys on CRT as necessary to edit the message.
 - f. With the cursor next to the last character of the message, depress the ENTER key. (TRANSMITTED will appear on the screen when the message is received by AFTN GS–200.)
- 3. *Preparing and Storing a Message on Tape (if no Other Messages are on Tape).***
 - a. Be sure no other messages are on the tape.
 - b. Prepare message on the CRT screen, beginning with /B.
 - c. Place Tape Unit switch on TAPE.
 - d. Be sure light in ON–LINE key is off, and depress F6 (Rewind Tape) function key.
 - e. Place cursor immediately after the last character of the message on the screen.
 - f. Depress F1 (Write File) function key. (The Write Mode indicator will flash.)
 - g. Depress the ENTER key. (Cursor scans message; Busy, Write Mode, and Receive From CRT indicator lights come on.)
 - h. When the cursor returns to the end of the message being stored, depress F3 (Stop) function key. (This puts the End–of–Message marker on tape.)
- 4. *Preparing and Storing a Message on Tape (When Other Messages are on Tape).***
 - a. Prepare message on CRT in proper format, beginning with /B.
 - b. Depress the NEW LINE key three or four times to place the cursor below the new message.
 - c. Place Tape Unit switch on TAPE.
 - d. Be sure light in ONBLINE key is off.
 - e. Locate the last message on tape by displaying that message on the screen. (Displayed messages will appear following the cursor.) To locate the last message, use one of the procedures in 5c below.
 - f. After locating and displaying the last message on tape, move the cursor to a position immediately after the last character of the new message to be stored on tape.
 - g. Depress F1 (Write File) function key.
 - h. Depress the ENTER key.

Table F-1. Procedures for Service B messages—continued

i. When the cursor returns to the end of message being stored, depress F3 (Stop) function key.

5. *Sending Messages from Tape to AFTN.*

- a. Be sure light in ON-LINE key of CRT is off and Tape Unit switch is on TAPE.
- b. Depress CTRL and CLEAR keys at the same time to clear the screen.
- c. Use one of the procedures below to search for or display the message to be transmitted.

(1) *Searching for a message on the tape.*

(a) Depress F9 (Find File) function key, and then depress the ON-LINE key of the CRT.

(b) Type in three-digit number, identifying the position of the message on tape.

(c) Depress the ON-LINE key of the CRT.

(d) Depress F2 (Read File) function key, and then quickly depress the ON-LINE key of the CRT.

(2) *Displaying a message from the tape.*

(a) Depress F6 (Rewind Tape) function key.

(b) Depress F2 (Read File) function key, and then quickly depress the ON-LINE key.

d. If there are more messages to transmit, repeat steps a through c above.

6. *Displaying Messages from Tape Sequentially.*

a. Be sure light in ON-LINE key is off, and then depress F6 (Rewind Tape) function key.

b. Depress F2 (Read File) function key, and then quickly depress the ON-LINE key. (The first message on tape will be displayed on the screen.)

c. To display the next message—

(1) Depress the ON-LINE key until the light goes off.

(2) Depress F2 (Read File) function key, and then quickly depress the ON-LINE key.

Table F-1. Procedures for Service B messages—continued

- d.** To skip the next message and display the following one—
 - (1)** Depress the ON-LINE key until the light goes off.
 - (2)** Depress F5 (Skip File) function key.
 - (3)** Depress F2 (Read File) function key, and then quickly depress the ON-LINE key.
- e.** To back up and display the previous message—
 - (1)** Depress the ON-LINE key until the light goes off.
 - (2)** Depress F4 (Rewind File) function key.
 - (3)** Depress F2 (Read File) function key, and then quickly depress the ON-LINE key.

7. Searching for Specific Messages to Display.

- a.** Be sure light in the ON-LINE key is off, and depress F9 (Find File) function key.
- b.** Depress the ON-LINE key until the light comes on.
- c.** Type in three-digit number to identify the position of the message on tape.
- d.** When the system locates the message, the Receive From CRT light will flash and the CRT will beep.
- e.** Depress the ON-LINE key until the light goes off.
- f.** Depress F2 (Read File) function key, and then quickly depress the ON-LINE key. (The message will be displayed on the screen.)
- g.** If the desired message is not displayed, repeat steps a through f above.

8. Printing Copies of Messages Being Transmitted. Depress CTRL and PRINT keys at the same time to print outgoing messages as they are transmitted.

Table F-2. Examples of Service B messages

1. Example of an ICAO Flight Plan.

/B
FF KZJXZQ KZMAZO MUHAZQ MHTGZQ
291326 KCHSYX
ZCJ
(FPL M664BIM
-C141/H-SI/C
-KCHS15// KZHU1633 MUHA1649
-/435F33/ UA9 A9 UA9 TBG
-MBH/1915
-REG/A40644 OPR/USAF STS/HAZ CARGO)

2. Example of an IFR Flight Plan.

/B
FF KZDCZQ
28153/ KADWYX
ZCW
ADW153///2 FP E116 C9/A 46/ ADW P132/ 31/
ADW..9LQ..PSB.J59.SYR.J29.PLB..VAL172/15..PBG

Appendix G

Restricted Area Usage for NATO Military Aircraft

This appendix implements portions of Standardization Agreement (STANAG) 2952. Thus, it standardizes the procedures for granting the use of restricted areas by NATO military aircraft. Use of these area may be given as result of an in-flight emergency or through bilateral agreements. Restricted areas may be used when a request is sent through diplomatic or NATO channels by the visiting nation or NATO command.

G–1. AGREEMENT

NATO nations have agreed that their military airfields may be used by the military aircraft of participating nations or other NATO nations. When a request for use of a restricted area is received, appropriate physical security measures are taken to preserve the security of the aircraft, classified components, and classified material on board. Participating nations also have agreed that, in certain cases, visiting aircraft commanders—in close cooperation with the national authorities—may restrict access to the aircraft cockpit or the aircraft to crewmembers only. This does not exclude necessary action to be taken by national authorities in the case of acute danger.

GB2. DEFINITIONS

The following terms and definitions are used for the purpose of this agreement:

- a. Aircraft**—air vehicles including fixed-wing, rotary-wing, and dirigible-type airships and balloons.
- b. Aircraft Commander**—the aircrewmember designated by competent authority as being in command of an aircraft and responsible for its safe operation and achieving the assigned mission.
- c. Authorized Personnel**—those personnel approved by the aircraft commander in close cooperation with national authorities who have a need to approach and/or have access to the aircraft.
- d. Physical Security**—those measures deemed necessary by the host nation to preserve the security of the restricted area and, thereby, the aircraft, its classified components, and classified material on board.
- e. Restricted Area**—an area under military jurisdiction in which special security measures are employed to prevent unauthorized entry.

G–3. RESTRICTED AREA CRITERIA

The perimeter of the restricted area will be clearly marked and protected. All entry and exit points will be controlled according to the security procedures of the host nation. Only those persons designated as authorized personnel will be permitted to enter and leave the restricted area.

GB4. PROCEDURES

Under normal circumstances, the physical security measures provided by NATO nations at their own airfields for their own aircraft are sufficient protection for visiting aircraft. Therefore, requests for restricted areas should not be the norm.

a. Notification.

(1) The host nation must be contacted through diplomatic or NATO channels a minimum of 48 hours in advance with the request for a restricted area for a visiting aircraft. After approval is received from the host nation, the abbreviation RAR (restricted area required) will be inserted in field number 18 of the NATO flight plan or block 18 of the International Civil Aviation Organization (ICAO) flight plan.

(2) In case of an in-flight emergency, the aerodrome of landing will be informed by radio (if possible) of the requirement for a restricted area as soon as possible.

(3) Bilateral agreements may exist between NATO nations that negate the need to notify them through diplomatic or NATO channels. In these cases, the abbreviation RAR will be inserted in field 18 or block 18 of the flight plan and the aerodrome of landing informed by radio as soon as possible.

b. Access Control.

(1) The host nation will provide the restricted area and the personnel necessary to protect it. The host nation also will ensure that only authorized personnel enter and leave the area.

(2) If required by the aircraft commander, the host nation will provide (when possible) secure storage for any classified equipment and material that the aircraft commander wants removed from the restricted area.

(3) If the aircraft is carrying sensitive material and access to the restricted area is restricted to the aircrew only, the aircraft commander may provide an aircrewmember to remain in or near the aircraft.

(4) If an escort is necessary for personnel without the appropriate security clearance, the aircraft commander may provide an aircrewmember or—in consultation with the host nation—may approve personnel with the appropriate security clearance from the host nation to conduct escort duties.

G–5. IMPLEMENTATION

The procedures in the paragraphs above pertain to those airfields at which restrictions to aircraft apply. The procedures will be implemented when the appropriate orders or instructions for their adoption have been issued to the forces concerned.

Appendix H

Mission Schedule/Briefing

This appendix gives instructions for completing Mission Schedule/Brief (DA Form 5484–R) (Table H–1). It shows a sample of a completed DA Form 5484–R (Figure H–1).

Table H–1. Instructions for completing Mission Schedule/Brief (DA Form 5484–R)

The mission brief may be accomplished by telephonic—or other means—provided all key elements are addressed and recorded by both parties to the brief. The briefer ensures that all key mission elements noted on the Mission Schedule/Brief are briefed according to AR 95–1. He documents completion of the briefing on the Mission Schedule/Brief. (Briefing officers for mission briefings will normally be members of the chain of command—not lower than platoon leader or operations officer.)

1. Front Side:

- a. Item 1: Date***
- b. Item 2: AC #* –** Enter aircraft tail number.
- c. Item 3: PC* –** Enter the name of the pilot and seat designation, and, if appropriate, the designation as air mission commander.
- d. Item 4: PI* –** Enter the name of the pilot and seat designation.
- e. Item 5: Crewmembers* –** Enter the names of nonrated crewmembers.
- f. Item 6: FC* –** Enter authorized flight condition codes for the mission as described in AR 95–1.
- g. Item 7: Mission* –** Enter the assigned mission number and/or title; that is, 3–02–01/air assault, maintenance test flight, contact APART, etc.
- h. Item 8: ETD/*ETE –** Enter estimated time of departure and estimated time en route.
- i. Item 9: PC* –** Pilot–in–command's initials. Initials are the PC's acknowledgment that he has been briefed by the chain–of–command on key elements of the mission and has briefed back key elements of the mission briefing.
- j. Item 10: Briefer* –** Initials of the commander or a qualified briefing officer—with designated risk management authority—constitute authorization for the flight. Initials indicate that—
 - (1)** Chain of command has briefed all key mission elements.
 - (2)** Risk management procedures have been completed.

**Table H-1. Instructions for completing Mission Schedule/Brief (DA Form 5484-R)—
continued**

(3) Identified risk has been reduced to the lowest acceptable level).

k. Item 11: RAV* – Risk assessment value, calculated risk level for mission based on unit risk management program.

l. Item 12: MS* – Mission status, to be completed by the PC at the end of the mission using the following codes:

(1) **MC** – Mission completed as briefed.

(2) **NC** – Mission was not completed as briefed; see remarks on the back of the schedule.

(3) **CX** – Canceled.

m. Item 13: Remarks – For local use as desired, continue on the back if required.

*** Item mandatory for all flights.**

2. Back Side:

The back side of the mission schedule will be use to document necessary mission status remarks. Example: 9 Nov 93, Msn 03-09-04, mission canceled by S-3, 1/20 Arty, initials M. S.

NOTES:

1. The Mission Schedule/Brief is used to document the completion of required briefings. As a minimum, it is retained in the unit file for at least 30 days.
2. The Mission Schedule/Brief is provided for the commander's use. Unit developed forms may be used as long as all mandatory items are covered.
3. Information contained on the Mission Schedule/Brief does not relieve aircrewmembers from the requirement to know and adhere to applicable regulations, SOPs, and policies.
4. Supporting and supported unit commanders coordinate and designate command relationships to execute mission briefings when aircrews are separated from their parent unit.

H-3

Appendix I**Manuals Used Daily**

This appendix is a guide to operations personnel in performing their dayBtoBday operations. Most units maintain a huge library of publications and reference manuals that may or may not be kept up to date. This appendix contains a list of critical publications that must be kept in flight operations. It gives a brief description of the contents of each publication pertaining to aviation operations. The operations sergeant is responsible for ensuring that these manuals are readily accessible. He must see that his soldiers know where to find the information and ensure that they know what it means. The descriptions list only subjects of major importance to operations personnel.

I-1. AR 25B50, PREPARING AND MANAGING CORRESPONDENCE

This publication covers—

- ! Memorandum format.
- ! Mail procedures.
- ! Labels.
- ! Model authority lines and signature blocks.
- ! Style practices.

I-2. AR 25-400-2, THE MODERN ARMY RECORDKEEPING SYSTEM (MARKS)

This publication outlines the procedures and requirements for labeling and filing documentation maintained by the flight operations. Files included are—

- ! Flight records.
- ! Aircrew training manual (ATM) records.
- ! Aircrew training program (ATP) waivers/extensions.
- ! Flight pay certificates.
- ! DA Forms 2408B12.
- ! Flight plans.
- ! Aircrew mission briefings.
- ! Passenger manifests.

FM 1–300

- ! Flight logs.

- ! Other documentation as prescribed by regulatory requirements or at the discretion of the commander.

I-3. AR 37–104–4, MILITARY PAY AND ALLOWANCES POLICY AND PROCEDURES—ACTIVE ARMY

This publication establishes the requirement and outlines procedures for completing the monthly flight pay exception certificate. It also prescribes the proper pay codes for nonrated crewmembers and noncrewmembers that are posted to any flight status issuance order.

I-4. AR 40–8, TEMPORARY FLYING RESTRICTIONS DUE TO EXOGENOUS FACTORS

This publication explains the temporary restriction to flying duties due to exogenous (external) factors affecting aircrew efficiency.

I-5. AR 40–501, STANDARDS OF MEDICAL FITNESS

This publication outlines the medical requirements for personnel on flying status. Major subjects of interest to flight operations personnel are—

- ! Completion of annual Flying Duty Medical Examinations (FDMEs).

- ! Requirements for completion of DA Form 4186.

- ! Disposition of personnel on extended temporary medical suspensions and personnel who are permanently medically disqualified from aviation service.

I-6. AR 95–SERIES

This series of regulations references many aspects of Army Aviation.

I-7. AR 385–95, ARMY AVIATION ACCIDENT PREVENTION

This regulation covers—

- ! Command responsibilities.

- ! Unit preaccident plan.

- ! Operational hazard reports (OHRs).

- ! Foreign object damage (FOD) prevention.

I-8. AR 570-4, MANPOWER MANAGEMENT

This regulation covers and defines operational flying slots for aviators used for total operational flying duty credit (TOFDC) credit.

I-9. AR 600-8-22, MILITARY AWARDS

This is a new regulation governing requirements for the basic, senior, and master aircraft crewmember badges. It superseded AR 672-5-1 and includes all of the message changes to the requirements.

I-10. AR 600-8-105, MILITARY ORDERS

This publication covers policy and procedures for preparing and issuing orders for military personnel and units. It prescribes movement designator codes (MDCs) for use in certain permanent change of station (PCS) orders.

I-11. AR 600-105, AVIATION SERVICE OF RATED ARMY OFFICERS

This publication contains eligibility for award of aeronautical ratings and badges for aviators and flight surgeons. It addresses—

- ! Requirements for continuous and conditional aviation career incentive pays (ACIPs).
- ! Temporary and nontemporary medical suspensions.
- ! Medical disqualifications.
- ! Flying evaluation board (FEB) selection procedures and conduct of an FEB.
- ! Flight surgeon minimum semiannual/annual ATP requirements.

I-12. AR 600-106, FLYING STATUS FOR NONRATED ARMY AVIATION PERSONNEL

This publication gives the commander authority to place selected military occupational specialty (MOS)Bqualified personnel on crewmember or noncrewmember flying status based on—

- ! The organization's manning document (modification table of organization and equipment) (MTOE)/tables of distribution and allowances (TDA)) and the number of aircraft assigned to the unit.
- ! Noncrewmember density positions based on assigned aircraft.
- ! Procedures for publishing and terminating flying status orders.
- ! ATP completion requirement and 120Bday advance removal from flight status of nonrated crewmember personnel.

I–13. DA PAM 600–3, COMMISSIONED OFFICER DEVELOPMENT AND CAREER MANAGEMENT

This pamphlet defines MOSs and skill identifiers for commissioned officers. It is found in UPDATE 14, Officer Ranks Personnel.

I–14. DA PAM 600–11, WARRANT OFFICER PROFESSIONAL DEVELOPMENT

This pamphlet defines MOSs and skill identifiers for warrant officers. It is found in UPDATE 14, Officer Ranks Personnel.

I–15. DA PAM 738–751, FUNCTIONAL USERS MANUAL FOR THE ARMY MAINTENANCE MANAGEMENT SYSTEM—AVIATION (TAMMS—A)

This pamphlet covers the correct completion of DA Form 2408B12.

I–16. TC 1–210, AIRCREW TRAINING PROGRAM COMMANDER'S GUIDE TO INDIVIDUAL AND CREW STANDARDIZATION

This guide—

- ! Defines flight activity categories (FACs) and readiness levels (RLs).
- ! Lists the respective semiannual minimum flight requirements.
- ! Contains guidance for developing the unit ATP and risk management procedures.
- ! Contains procedures for formulating the unit flying hour program.

I–17. TM 5–823–4, MARKING OF ARMY AIRFIELD HELIPORT OPERATIONAL AND MAINTENANCE FACILITIES

This manual provides criteria for marking Army airfields, heliports, and obstructions to air navigation at Army installations within the United States. For marking of Army airfields, heliports, and obstructions to air navigation located in foreign countries, it serves as the basic reference consistent with host country criteria.

I–18. SC 6210–97–CL–E02, SUPPLEMENTAL EQUIPMENT, AIRCRAFT OPERATIONAL AREA LIGHT SET: AIRFIELD RUNWAY

This publication describes airfield/runway specifications.

I-19. STP 1-93P1-SM, SOLDIER'S MANUAL, MOS 93P, AVIATION OPERATIONS SPECIALIST SKILL LEVEL 1

This soldier's manual identifies the individual MOS training requirements for soldiers in MOS 93P, Skill Level 1.

I-20. STP 1-93P24-SM-TG, SOLDIER'S MANUAL SKILL LEVELS 2/3/4 AND TRAINER'S GUIDE, MOS 93P, AVIATION OPERATIONS SPECIALIST

This soldier's manual identifies the individual MOS training requirements for soldier in MOS 93P. Commanders, trainers, and soldiers should use it to plan, conduct, and evaluate individual training in the units. It is the primary MOS reference to support self-development and training of every soldier.

I-21. GOLD BOOK

This publication contains the current Army aircraft inventory by location and tail number. Flight operations personnel can use it to ensure that only aircraft in the current inventory are posted to DA Form 759. It is updated quarterly. Organizations can be placed on the distribution list by writing: Department of the Army, United States Army Materiel Command (USAMC) Logistics Support Activity, Redstone Arsenal, AL 35898-7466.

I-22. GUIDE TO AVIATION RESOURCES MANAGEMENT FOR AIRCRAFT MISHAP PREVENTION, 12TH EDITION, MARCH 1992

This publication is an excellent planning tool in developing an overall unit safety and standardization program. It may be obtained in book version or on disc. This publication is available from the United States Army Aviation Center, Aviation Branch Safety Office, ATTN: ATZQ-S, Fort Rucker, AL 36362.

I-23. MISC PUB 13-1, DODPM, DEPARTMENT OF DEFENSE MILITARY PAY AND ALLOWANCES ENTITLEMENTS MANUAL (DOD 7000.14-R)

This publication governs—

- ! Hazardous duty incentive pay (HDIP) for crewmembers and noncrewmembers, 3-month grace period.
- ! Change in status from crewmember to noncrewmember, 6-month grace period under conditions of aircraft unavailability.
- ! ACIP for rated aviators (page 155-173).

Appendix J

Monthly Exception Certification

Personnel who are required to fly a monthly minimum must have their flight hours verified and signed by the unit commander. This verification is called a monthly exception certificate. Personnel who become incapacitated because of an aircraft accident must have a certificate of incapacitation prepared and signed by the appropriate medical authority. Appendix J shows samples of two certificates: a monthly exception certificate (Figure J-1) and a certificate of incapacitation (Figure J-2). It also shows a sample of a 120-day advance notice of removal from flight status (Figure J-3). AR 37-104-4 provides more information on the two certificates.

OFFICE SYMBOL (MARKS NUMBER)			DATE
MEMORANDUM FOR Finance and Accounting Office, ATTN: Military Pay Section			
SUBJECT: Monthly Exception Certificate			
1. The following individual has not qualified for flight pay for the month of September 1997:			
<u>NAME</u>	<u>PAYGRADE</u>	<u>SSN</u>	
NUNEZ, ALFONSO	E-7	XXX-XX-XXXX	
2. The following individual has met the requirements to qualify for flight pay for the month indicated:			
<u>NAME</u>	<u>PAY GRADE</u>	<u>SSN</u>	<u>MONTH</u>
BOATRIGHT, WALTER P.	E-6	XXX-XX-XXXX	AUG 97
3. The point of contact for this action is SFC Thrush, 262-6554.			
Unit Commander's Signature Block "(include SSN)"			

Figure J-1. Sample Monthly Exception Certificate

OFFICE SYMBOL (MARKS NUMBER)	DATE
MEMORANDUM FOR Finance and Accounting Office, ATTN: Military Pay Section	
SUBJECT: Certificate of Incapacitation	
1. SGT John E. Doe, 123-45-6789, Company D, 2/229 Aviation Regiment, is physically incapacitated and unable to perform his duties as a UH-60 Black Hawk crewchief as a result of a Class B aircraft accident. This incapacity occurred on 18 January 1991 while SGT Doe's unit was maneuvering against an enemy in the northern region of Saudi Arabia during Operation Desert Storm. SGT Doe continued to be incapacitated from 18 January 1991 to 28 February 1991. 2. SGT Doe is entitled to incentive pay during the period of incapacitation as outlined in the DOD Military Pay and Allowances Entitlements Manual. 3. The POC for this action is SFC Mike Jones, x-1234. Medical Authority's Signature Block	

Figure J-2. Sample Certificate of Incapacitation

OFFICE SYMBOL (MARKS NUMBER)	DATE
MEMORANDUM FOR Individual, SSN	
SUBJECT: 120-day Advanced Notice of Removal from Flight Status	
1. Because of <u> (Reason) </u>, you wish be removed from flight status on <u> (Effective Date) </u> and your flight pay will be terminated on <u> (Date Additional Pay Terminated) </u>. It is important that you financially prepare for the loss of the hazardous duty incentive pay 2. The point of contact for this action is SFC Jones, 234-2356.	
Unit Commander's Signature Block XXXXXXX, Xx XXXXXXXXXXXXX	
OFFICE SYMBOL (Of the preparing office) 1st End initial/phone No.	Action officer/typist's Example: SFC Simpson/jls/7272
I acknowledge the receipt of this 120-day advanced notice of my pending removal from flight status. I further understand that I will lose the hazardous duty incentive pay associated with that flight status.	
Individual's Signature Block XXXXXXXXXXX, Xx XXXXXXXXXXXXX	

Figure J-3. Sample 120-Day Advance Notice of Removal from Flight Status

Appendix K

Aviator Flight Records Checklist

This appendix provides an example aviator flight records checklist. It may be used as a guide for maintaining or inspecting flight records. This checklist (Table K-1) is only a guide and may be modified to suit the unit's needs.

Table K-1. Aviator flight records checklist		
NAME:		
UNIT:		
1. DA Form 3513 (Individual Flight Record Folder)	YES	NO
a. Are there two labels on the folder?		
b. Are the labels completed according to AR 25-400-2?		
2. PART I – BIO/DEMOGRAPHIC		
a. Is sheet number correct?		
b. Is the Aviation Service Entry Date (ASED) correct?		
c. Does the duty position correctly match The Army Authorization Documents System (TAADS) document?		
d. Is block 13 properly completed to indicate that the aviator is in an operational or nonoperational position?		
3. PART IIa – FLIGHT HOURS		
a. Are all the aircraft listed currently in the active Army inventory?		
b. Are aircraft qualifications for the aircraft listed properly documented within the record?		
c. Are aircraft night systems qualifications properly documented?		
d. Is the aviator logging the correct duty symbols for the type of duties for which qualified?		
e. Has the aviator logged flight time in aircraft not qualified in?		
f. If so, is the aircraft listed in column a. as rotary-wing (RW) or fixed-wing (FW)?		

Table K–1. Aviator flight records checklist—continued			
G. Do total hours flown in each aircraft match the DA Forms 759–1 posted to the aviator's record?		YES	NO
PART IIb – TOTAL HOURS			
a. Do the historical hours (block g) match the historical hours of the previous DA Form 759?			
b. Do the totals in blocks a through g match the total hours in block h?			
4. PART III – ATP			
a. Has the data from the previously closed out DA Form 759 been brought forward as required in block 2?			
b. If the aviator was not required to complete an annual proficiency and readiness test (APART), was the information in blocks 9 and 10 brought forward from the previous closeout as required?			
c. Was the aviator required to complete an APART?			
d. If the aviator was required to complete an APART, is the date correct?			
5. PART V – REMARKS			
a. Are errors found during record audit procedures properly annotated? • Audit not conducted			
b. Are aircraft qualification course completions annotated to the closeout?			
c. Are DA appointments annotated to the closeout?			
d. Is any aircraft accident which the aviator was involved in annotated to the closeout?	N/A		
e. Are temporary medical suspensions and lifting of those suspensions annotated to the closeout?			
f. Are medical waivers posted to the closeout?			
g. Did the aviator complete the flying duty medical examination (FDME) within the last 90 days preceding the end of the aviator's birth month?			
h. If (g) is "no," did the flight surgeon grant a one-time extension of 1 month before the end of the aviator's birth month?	N/A		
i. Was the FDME completed before the end of the extension?			
j. Was flight evaluation board (FEB) action warranted?			

Table K-1. Aviator flight records checklist—continued			
	N/A	YES	NO
k. Was FEB action taken?			
l. Did the aviator complete all aircrew training manual (ATM) task iteration requirements?			
m. If (l) is "no," did the aviator receive an extension or waiver for those uncompleted tasks?			
n. Is the mandatory remark (TC 1-210) posted to the closeout stating that the aviator has not completed all ATP requirements and why?	N/A		
o. Is this a flight activity category (FAC) 3 aviator?			
p. If (o) is "yes," has the aviator completed the synthetic flight training systems (SFTS) requirements and the Standardization Flight Evaluation?			
q. Is this a nonoperational aviator?			
6. MEDICAL			
a. Is the aviator newly assigned to the unit?			
b. If (a) is "yes," does the aviator have a Report To New Duty Station DA Form 4186 posted to the flight record?			
c. Does the aviator have a valid FDME posted to the flight record?			
d. Are all the blocks of the DA Form 4186 properly completed and readable?			
e. Has the aviator signed the DA Form(s) 4186 as required?			
f. Has the unit commander signed the DA Form(s) as required?			
g. Are any medical waivers posted to the flight record?			
h. Are waivers, Temporary Medical Suspensions and Return to Flight Duty DA Form(s) 4186 marked with clearly stated periods of retention as required by FM 1-300? • No Waivers/Suspensions /Up Slips located in flight records.			
i. Is the unit commander's copy of all DA Form 4186 posted to the record per AR 40-501?			
7. ORDERS	N/A		
Are the following orders posted to the aviator's record? • Flight School completion/Aviator Badge designation.			
• Senior Aviator designation.			

[illegible]

Appendix L

Nonrated Crewmember Flight Records Checklist

This appendix provides an example nonrated crewmember flight records checklist. It may be used as a guide for maintaining or inspecting flight records. This checklist (Table L-1) is only a guide and may be modified to suit the unit's needs.

Table L-1. Nonrated crewmember flight records checklist		
NAME:		
UNIT:		
1. DA Form 3513 (Individual Flight Records Folder)	YES	NO
a. Are there two labels on the folder?		
b. Are the labels completed according to AR 25-400-2?		
2. PART I – BIO/DEMOGRAPHIC		
a. Is the sheet number correct?		
b. Does the duty position correctly match The Army Authorization Documents System (TAADS) document?		
c. Is the military occupational specialty (MOS) properly annotated?		
d. Is block 13 completed properly to indicate that the aviator is an operational or non-operational position?		
3. PART IIa – FLIGHT HOURS		
a. Is the nonrated crewmember logging time in aircraft for which not qualified?		
b. Are aircraft qualifications for the aircraft listed properly documented within the record?		
c. Are aircraft night system qualifications properly documented?		
d. Is the nonrated crewmember logging the correct duty symbol for the type of duty for which qualified?		
PART IIb – FLIGHT HOURS () Crewmember		
a. What type of flight status is the nonrated crewmember performing? () Nonrated crewmember		
b. Is this individual a flight surgeon?		
c. Do the total hours flown in each aircraft match DA Form 759-1 and DA Form 759-3 for flight surgeons?		
d. Do the total hours flown in each aircraft match DA Form 759-1 and DA Form 759-3 for aerial observers?		

Table L–1. Nonrated crewmember flight records checklist—continued		
	YES	NO
e. Do the total hours flown in each aircraft match DA Form 759–3 and DA Form 759–3 for all other nonrated crewmembers?		
SECTION B – TOTAL HOURS Do the hours in blocks a, b, and f match those annotated on DA Form 759–1 and DA Form 759–3?		
4. PART III – Aircrew Training Program (ATP)		
a. Has the crewmember been integrated into the ATP program?		
b. Was the nonrated crewmember required to complete an annual proficiency and readiness test (APART)?		
c. If the nonrated crewmember was required to complete an APART, is the completion date correct?		
d. Is the individual a noncrewmember?		
e. If (d) is "yes," has the individual performed duties as a crewmember, when required to accomplish the mission?		
f. If (e) is "yes," has the individual been integrated into the ATP program?		
g. If (f) is "yes," has the individual completed all required ATP tasks?		
h. Is this individual a flight surgeon?		
i. If (h) is "yes," has the individual completed the semiannual flying-hour requirements according to AR 600B105?		
j. Has the individual completed the annual flying-hour requirements according to AR 600–1–5?		
k. If (i) and (j) are no and have not been waived, has a waiver been requested ? Has a flight evaluation board (FEB) determination been conducted?		
l. This individual is performing duties as an: 9 SI 9 FI 9 NCT SI = nonrated standardization instructor FI = nonrated crewmember instructor NCT = nonrated crewmember trainer		
m. Is the individual qualified to perform those duties?		
5. PART 5 – REMARKS		
a. Are errors found during record audit procedures properly annotated?		

Table L–1. Nonrated crewmember flight records checklist—continued		
	YES	NO
b. Are duty appointments/qualifications such as SI, FI, or NCT annotated in the flight records?		
c. Are any extensions or waivers for any uncompleted ATP tasks annotated to the closeout?		
d. Is the mandatory remark (TC 1–210) posted to the closeout stating that the crewmember has not completed all ATP requirements and why?		
e. Does the unit annotate the 120–day notice given to a crewmember to the closeout?		
6. MEDICAL		
a. Is the aviator newly assigned to the unit?		
b. If "yes," does the individual have a Report To Duty Station DA Form 4186 posted to the flight record?		
c. Does the individual have a valid flying duty medical examination (FDME) posted to the flight record?		
d. Are all blocks of the DA Form 4186 properly completed and readable?		
e. Has the individual signed the DA Form 4186 as required?		
f. Has the unit commander signed the DA Form 4186 as required?		
g. Are any medical waivers posted to the flight record?		
h. Are Waivers, Temporary Medical Suspensions, and Return to Flight Duty DA Form 4186 marked with clearly stated periods of retention as required by FM 1–300?		
i. Is the unit commander's copy of all DA Forms 4186 posted to the record per AR 40–501?		
7. ORDERS		
a. Are the following orders posted to the individual's flight records, if needed?		
9 Initial Qualification/Badge Designation		
9 Performance Orders		
9 Termination Orders		
9 Senior Crewmember Badge		
9 Master Crewmember Designation		
9 Appointment Orders 9 SI 9 FI 9 NCT 9 TI (See 4. PART III I. for abbreviations.) (TI = technical inspector)		

Glossary

A	acceptance test flight
AA	air to air
A²C²	Army airspace command and control
AAF	Army airfield
accum	accumulated
acft	aircraft
ACIP	aviation career incentive pay
ACO	airspace control order
ACP	air control point
ACS&R	air crash, search, and rescue
AD	automatic distribution
admin	administrative
AFB	Air Force base
AFRS	automated flight record system
AFSC	US Air Force Systems Command
AFTN	Aeronautical Fixed Telecommunications Network
AH	attack helicopter
AIM	Airman's Information Manual
AL	Alabama
ALAN	aircraft landing authorization number
ALNOT	alert notice
alt	altitude
AME	airspace management element; aviation medical examiner
AO	aeroscout observer; aerial fire support observer
APART	Annual Proficiency and Readiness Test
APU	auxiliary power unit
AR	Army regulation
ARAC	Army radar approach control
ARNG	Army National Guard
ARTCC	air route traffic control center
ASED	aviation service entry date
ASO	aviation safety officer
ASR	airport surveillance radar
AT&A	air traffic and airspace
ATO	air tasking order
ATC	air traffic control
ATM	aircrew training manual
ATP	aircrew training program
ATS	air traffic services
attn	attention
auto	automatic
AV	aviation
avn	aviation
AWS	Air Weather Service

B	backseat
BASOPS	base operations
BHM	Birmingham (Alabama)
bio	biographical
BOI	basis of issue
BS	backseat
C	combat
CALP	Civil Aircraft Landing permit
cat	category
cav	cavalry
cdr	commander
CE	crew chief
CH	cargo helicopter
CHEMO	chemical officer
civ	civilian
cnld	canceled
co	company
COMUSARCENT	Commander, US Army Central Forces Command
cond	condition
config	configuration
CONUS	continental United States
CP	copilot
CPAC	Civilian Personnel Advisory Center
CPT	captain
CRM	crew member
CRT	cathode ray tube
CSAR	combat search and rescue
ctrl	control
cx	cancelled
cyc	cycle
D	day; imminent danger
DA	Department of the Army
DAC	Department of the Army Civilian
DC	District of Columbia
DCSLOG	Deputy Chief of Staff of Logistics
DCSOPS	Deputy Chief of Staff for Operations and Plans
det	detachment
DG	night vision goggles daylight filter
DHR	Directorate of Human Resources
DMA	Defense Mapping Agency
DMOS	duty military occupational specialty
DOB	date of birth
DOD	Department of Defense
DODAAC	Department of Defense activity address code
dr	direct
DS	direct support; night vision system daylight filter

DSN	Defense Switching Network
DTG	date–time group
DPTSEC	Directorate of Plans, Training, Mobilization, and Security
DPW	Directorate of Public Works
DVFR	defense visual flight rules
eject	ejection
ELT	emergency locator transmitter
ETA	estimated time of arrival
ETD	estimated time of departure
eval	evaluation
exam	examination
F	front seat; maintenance test flight
FAA	Federal Aviation Administration
FAAH	Federal Aviation Administration Handbook
FAC	flight activity category
FAR	Federal Aviation Regulation
FARP	forward arming and refueling point
FE	flight engineer
FEB	flying evaluation board
FDME	Flying Duty Medical Exam
fgn	foreign
FI	nonrated crewmember instructor
FL	Florida
FLEXHA	fuel exhaustion time
FLIP	flight information publication
flt	flight
FM	field manual; frequency modulated
FOD	foreign object damage
FS	front seat
FSS	flight service station
Ft	fort
FW	fixed wing
fwd	forward
G2	Assistant Chief of Staff, G2 (Intelligence)
G3	Assistant Chief of Staff, G3 (Operations and Plans)
GA	Georgia
GCA	ground–controlled approach
GP	general planning
GPS	global positioning system
GS	general support
H	hour; hooded instrument flight
HDIP	hazardous duty incentive pay
HF	high frequency
HHC	headquarters and headquarters company
HIRTA	high–intensity radio transmission area

HIT	health indicator test
HO	hands on
HQDA	Headquarters, Department of the Army
hr	hour
ICAO	International Civil Aviation Organization
ID	identification
IDF	1 st Infantry Division
IE	instrument flight examiner
IFR	instrument flight rules
IFRF	Individual Flight Records Folder
ILS	instrument landing system
IMC	instrument meteorological condition
info	information
INREQ	information request
IP	instructor pilot
JAX	Jacksonville (Florida)
JP	jet petroleum
JRCC	joint rescue coordination center
JUA	joint use airspace
lctd	located
ldg	landing
LOA	letter of agreement
LOC	localizer
LZ	landing zone
m	meter
MACOM	major Army command
maint	maintenance
MAJ	major
MARKS	Modern Army Recordkeeping System
MD	Maryland
MDC	movement designator code
ME	maintenance test flight evaluator
med	medical
MEDEVAC	medical evacuation
METL	mission essential task list
METT–T	mission, enemy, terrain, troops, and time available
MFR	memorandum for record
MHz	megahertz
MI	military intelligence
MIJI	meaconing, intrusion, jamming, and interference
mm	millimeter
MO	flight surgeon or medical personnel; Missouri
MOPP	mission-oriented protective posture
MOS	military occupational specialty
MP	maintenance test pilot
MS	mission status

MSE	mobile subscriber equipment
msg	message
msn	mission
MTFE	maintenance test flight evaluation
MTOE	modification table of organization and equipment
MWA	military weather advisory
N	night
NA	not applicable
NATO	North Atlantic Treaty Organization
nav	navigation
NAVAID	navigational aid
NBC	nuclear, biological, chemical
NCO	noncommissioned officer
NCOIC	noncommissioned officer in charge
NCRM	noncrewmember
NCT	nonrated crewmember trainer
NDB	nondirectional radio beacon
neg	negative
NFPA	National Fire Protection Association
NG	National Guard
NGB	National Guard Bureau
NIMA	National Imagery and Mapping Agency
NLT	no later than
NMAC	near midair collision
no	number
NOE	nap-of-the-earth
nonoper	nonoperational
NOS	National Ocean Survey
NOTAM	notice to airmen
NS	night vision system
NTC	National Training Center
NVD	night vision device
NVG	night vision goggles
NWS	National Weather Service
OCONUS	outside continental United States
ODCSOPS	Office of the Deputy Chief of Staff for Operations and Plans
OF	optional form
OD	olive drab
OH	observation helicopter
OHR	operational hazard report
OPCON	operational control
oper	operational
OPSEC	operations security
ORB	Officer Record Brief
OVR	overcast
OZR	Ozark (Alabama)

FM 1–300

PAC	Personnel and Administration Center
PAR	precision approach radar
PC	pilot in command
PCS	permanent change of station
PERSCOM	United States Army Total Personnel Command
PI	pilot
PID	personnel information data
PIREP	pilot report
PMCS	preventive maintenance checks and services
POB	personnel on board
POC	point of contact
POL	petroleum, oils, and lubricants
PPR	prior permission required
QALQ	(information request to departure station)
QSTAG	Quadripartite Standardization Agreement
RA	Regular Army
RAR	restricted area required
RAV	risk assessment value
RCC	rescue coordination center
rckt	rocket
regt	regiment
RFO	request for orders
RL	readiness level
RON	remain overnight
RRS	remainder of same route
RW	rotary wing
rwyt	runway
S	service
S2	Intelligence Officer (US Army)
S3	Operations and Training Officer (US Army)
SAR	search and rescue
SARCC	search and rescue coordination center
sec	sectional
SF	standard form
SFC	sergeant first class
SGT	sergeant
SI	nonrated crewmember standardization instructor; standardization flight engineer instructor
SM	soldier's manual
SMCT	soldier's manual of common tasks
SOP	standing operating procedure
SP	standardization instructor pilot
SQI	skill qualification identifier
SSAN	social security account number
SSN	social security number
sta	station

STANAG	Standardization Agreement
std	standard
STP	soldier training publication
SUA	special-use airspace
sym	symbol
T	training
TAADS	The Army Authorization Documents System
tac	tactical
TAMMS–A	The Army Maintenance Management System–Aviation
TAS	true airspeed
TC	training circular
TD	transmitter distributor
TDA	table(s) of distribution and allowances
TDY	temporary duty
term	terminal
TERPS	terminal instrument procedures
TG	trainer's guide
TM	technical manual
tng	training
TOC	tactical operations center
TOE	table(s) of organization and equipment
TOFDC	total operational flying duty credit
TOW	tube-launched, optically tracked, wire-guided missile
TR	terrain flight
TRADOC	United States Army Training and Doctrine Command
UCN	urgent change notice
UH	utility helicopter
UHF	ultrahigh frequency
UP	under provisions of
UTC	coordinated universal time
US	United States (of America)
USAAVNC	United States Army Aviation Center
USAF	United States Air Force
USAMC	United States Army Materiel Command
USAR	United States Army Reserve
USCG	United States Coast Guard
USR	unit status report
UT	unit trainer
UTC	coordinated universal time
VA	Virginia
VFR	visual flight rules
VHF	very high frequency
VIP	very important person
VMC	visual meteorological condition
vol	volume
VOR	VHF omnidirectional radio range

FM 1–300

W

WATS

weather instrument flight

wide area telephone service

X

XP

experimental test flight

experimental test pilot

Index

This index is organized alphabetically by topics and subtopics. Topics and subtopics are identified by page numbers.

ACIP. See Aviation, career incentive pay.

AFRS. See Automated flight record system.

Air

crash, search, and rescue, 1-4, 2-18

navigation obstruction

lighting, 3-2, 3-3

marking, 3-3, 3-4

traffic and airspace officer, 1-1, 1-5

traffic control

chief, 1-5

division, 1-2, 1-3, 1-5

light signals, 2-2, 3-7

Aircraft

accident

classification, 6-3, 7-52, 7-53

investigation, 1-6, 6-3, 7-7

prevention plan, 6-1

assignment, 5-4, 5-5

closeout summary

nonrated crewmember. See Nonrated crewmember flight

records, aircraft closeout summary.

rated crewmember. See Rated crewmember flight records,

aircraft closeout summary.

identification, 2-10

refueling, 3-4, 3-7, 4-1 through 4-3, 5-7

service personnel, 3-1, 3-2

tiedown, 3-4, 6-2

Aircrew

briefings, 2-4, 2-7, 5-16, H-1 through H-3

missions, 5-16

training

program, 5-6 through 5-9, 7-1 through 7-6, 7-50 through 7-53, 7-62, I-1, I-3, I-4,

L-2

records, 5-11, 5-12

Airfield

appearance, 3-4

certification, 2-16, A-1

command element, 1-1

commander, 1-3, 1-4, 1-7, 2-2, 2-16 through 2-18, C-1

hazards marking, 3-3

inspection, 2-16, 3-1, 3-5, A-1

- joint use, 2-19
- management considerations, 1-3, 1-4, A-1 through A-5
- operations
 - division, 1-1, 1-2
 - manual, 2-16 through 2-18
 - officer, 1-4, 2-5, 2-19, 3-6, C-1
- organization, 1-1 through 1-3
- safety officer, 1-6
- services, 1-1 through 1-4, 1-7, 2-1 through 2-8
- Airspace
 - management element, 5-1
 - overlay, 5-16
- Alert
 - notice, C-8 through C-10
 - notification, 5-9
- ALNOT. See Alert, notice.
- AME. See Airspace, management element.
- Anchors, 3-4
- Annual closeout
 - nonrated crewmember. See Nonrated crewmember flight records, annual closeout.
 - rated crew member. See Rated crewmember flight records, annual closeout.
- APART. See Aviator Proficiency and Readiness Test.
- Army Aviator's Flight Record (DA Form 2408-12), 7-8, 7-10 through 7-16, 7-23, 7-24, I-1, I-4
- AT&A officer. See Air, traffic and airspace officer.
- ATP. See Aircrew, training program.
- Automated flight records system, 7-1, 7-4, 7-63, 7-64
- Aviation
 - career incentive pay, 7-9, I-5, J-1 through J-3
 - operations specialist, 2-1 through 2-3, 2-5, 5-4, 5-7, 5-10, 5-11
 - position
 - nonoperational, 7-1 through 7-4, 7-6 through 7-8, 7-46 through 7-52
 - operational, 7-1 through 7-4, 7-6 through 7-8, 7-46 through 7-52
 - responsibility transfer, E-1 through E-3
 - service entry date, 7-46
- Aviator Proficiency and Readiness Test, 7-50, 7-51, K-2, L-2
- Base operations, 2-8, 2-9, 2-15
- BASOPS. See Base operations.
- Certificate of incapacitation, J-1, J-2
- Civilian flight hours, 7-8, 7-9, 7-47 through 7-49
- Classified cargo, 6-4
- Clubs
 - flying, 2-19, A-2
 - model airplane, A-2

sports parachute, 2-19, A-2

Combat

hours, 7-25 through 7-28, 7-30 through 7-33, 7-36 through 7-39, 7-42 through 7-45, 7-55, 7-57, 7-59, 7-61

search and rescue, 5-16, C-3, C-4

Communications

center, 2-8 through 2-10

chief, 5-4, 5-15

equipment, 5-4, 5-15

landline, 5-15

network, 5-15

search, 2-9, 2-10, 5-4, 5-10, C-5 through C-12

security, 5-4, 5-9, 5-15, 5-16

system, 1-5, 2-8, 5-15

Compass-swinging bases, 3-2

Component designation, 7-46, 7-54

Consolidation worksheet

nonrated crewmember. See Nonrated crewmember flight records, consolidation worksheet.

rated crewmember. See Rated crewmember flight records, consolidation worksheet.

Crash alarm systems, 2-3, C-2 through C-4

Crew-designated station, 7-47

Crew endurance, 5-2, 5-4, 5-13

Crowd control, C-2

Daily staff journal, 5-12

Decontamination stations, 5-3

Defense Mapping Agency, D-1 through D-4, D-10

Disabled aircraft removal, C-3, C-4

Disaster relief operations, 6-2

DMOS. See Duty military occupational specialty.

Duty military occupational specialty, 7-46

ELT. See Emergency locator transmitter.

Emergency locator transmitter, C-9, C-12

FAC. See Flight, activity category.

Facility memorandum, 2-18, A-1, B-1

FARP. See Forward arming and refueling point.

Fire

extinguisher, 3-3, 3-4, 4-3

fighting, 6-4, C-3

hydrant and shelters, 3-3

Flight

activity category, 7-50, 7-53

condition symbols. See Symbols, flight condition.

dispatch section, 2-2 through 2-4

evaluation board, 7-53

- information publications, 2-1, 2-3, 2-7, 2-10, 2-15, 2-19, 5-6, D-1 through D-10
- movement messages, 2-6, 2-11 through 2-15
- operations chief, 1-6, 1-7
- physical, 7-9, 7-50, 7-53
- planning room, 2-5, 2-6 through 2-8, 5-6
- position. See Aviation, position.
- service communications system, 2-8
- service station, 2-8, 5-6, C-4, C-5 through C-12
- simulator, 7-16, 7-20, 7-34, 7-47, 7-48
- surgeon, 7-31, 7-42, 7-43, 7-57, 7-58
- FLIP. See Flight, information publications.
- Flying
 - duty symbols. See Symbols, flying duty.
 - hour reports, 5-4
- Forward arming and refueling point, 4-3, 5-12, 5-14
- FSS. See Flight, service station.
- Fuel
 - contamination, 4-2
 - exhaustion time, C-6, C-10
 - sample bottles, 3-4
- Ground guides, 3-2, 3-7, 3-8
- Grounding rods, 3-4, 3-7
- Hazardous
 - area services, C-11
 - cargo, 2-3, 6-4
 - duty incentive pay, 7-9, 7-24, 7-29, 7-30
- HDIP. See Hazardous, duty incentive pay.
- Heliport hazards marking. See Airfield, hazards marking.
- High wind evacuation. See Hurricane evacuation.
- Historical
 - hours, 7-47, 7-49, 7-55, 7-57, 7-59, 7-61
 - narrative, 7-51
- Hurricane evacuation, 6-2, A-2
- IFRF. See Individual Flight Records Folder.
- Imminent danger hours, 7-15, 7-16, 7-19, 7-20, 7-25 through 7-28, 7-29, 7-31 through 7-33, 7-35 through 7-39, 7-42 through 7-45, 7-49, 7-53, 7-55 through 7-57
- Individual Flight Records Folder, 7-1 through 7-5, 7-46, 7-50
- Information request, C-7, C-8
- INREQ. See Information request.
- Joint rescue coordination center, C-4, C-10, C-11
- Joint-use airspace, 1-4, 1-5
- Joint-use airfield, 2-19
- JRCC. See Joint rescue coordination center.
- Letter of agreement, 1-5, 2-8, 2-18, 2-19, B-1, B-3

Lounge

 pilots, 2-8
 VIP, 2-16

Map

 air crash, search, and rescue, 2-18, C-3, C-4
 crash rescue, 1-4, 2-7
 hazard, 1-4, 5-2, 5-5
 operations, 5-10, 5-16
 reconnaissance, 5-16
 situation, 5-11, 5-12, 5-16
 tactical, 2-7, 5-16

MARKS. See Modern Army Recordkeeping System.

Marshalers. See Ground guides.

Medical

 clearance, 7-6, 7-9
 examination. See Flight, physical.
 grounding rods, 3-4
 suspension, 7-5, 7-6, 7-52, 7-53
 waiver, 7-5, 7-6, 7-53

Message

 flight movement. See Flight, movement messages.
 priority, 2-9, 2-10
 remain overnight, 2-14, 2-15
 Service B, 2-8 through 2-9, 2-15, A-5, C-7, C-8, C-10, F-1
 through F-5
 Service F, 2-8, C-10

Microprocessors, 2-8

Mission symbols. See Symbols, mission.

Modern Army Recordkeeping System, 7-2 through 7-5

Monthly exception certificate, 7-10, J-1

National Search and Rescue Plan, 2-15, C-3, C-4

Night signaling, 3-7

Night vision

 device, 5-8, 7-47, 7-48
 goggles, 7-12, 7-52
 system, 7-12, 7-47, 7-48

Nonrated crewmember flight records

 aircraft closeout summary
 completed forms (samples), 7-42 through 7-45
 preparation instructions, 7-40 through 7-41, 7-47 through 7-49
 annual closeout
 completed forms (samples), 7-56 through 7-63
 preparation instructions, 7-47 through 7-52
 consolidation worksheet
 completed forms (samples), 7-31 through 7-33
 preparation instructions, 7-29, 7-30
 temporary worksheet

FM 1–300

completed forms (samples), 7–25 through 7–28
preparation instructions, 7–23, 7–24
NOTAM display board, 2–7

Obstruction

lighting, 3–3
marking, 2–17, 3–2, 3–3

OHR. See Operational hazard report.

Operational hazard report, 1–5, 2–6, 6–2, 6–3, A–3

Operations letter, 1–5, 2–19, B–1, B–2

OPSEC

procedures, 2–15, 2–19, 5–3
violations, 2–1, 2–2, 3–1, 5–5, 5–12

Overdue aircraft actions, 2–2, 2–9, 5–4, 6–1, C–5 through C–12

Personnel refueling requirements, 4–3

Petroleum, oils and lubricants, 1–1, 1–2, 3–6, 4–1 through 4–3

POL. See Petroleum, oils, and lubricants.

Preaccident plan, 1–4, 6–1, C–3

QALQ message, C–5 through C–7

Rated crewmember flight records

aircraft closeout summary
completed forms (samples), 7–36 through 7–39
preparation instructions, 7–34, 7–35
consolidation worksheet
completed forms (samples), 7–21, 7–22
preparation instructions, 7–19, 7–20
temporary worksheet
completed forms (samples), 7–17, 7–18
preparation instructions, 7–15, 7–16

Records and reports, 5–11, 5–12

Refuelers, 4–2, 4–3

Rescue coordination center, C–4, C–7 through C–9

Restricted area usage, 2–15, G–1, G–2

Runway markers, 3–2, 3–3

Search and rescue, 2–15, 2–18, 5–4, 5–10, 5–11, 5–12, 5–16, A–4, C–3 through C–12

Seat designation, 7–15, 7–16, 7–34, 7–35

Service component category code. See Component designation.

Shift change briefings, 2–4, E–2, E–3

Signal flags, 3–7

Snow and ice, 2–17, 3–2, 3–5

Spark arresters, 3–6

Special mission aircraft, 2–10

STANAG

2952, G–1

Standard remarks (examples)

nonrated crewmember, 7-52, 7-53

rated crewmember, 7-52, 7-53

Symbols

flight condition, 7-8, 7-12 through 7-14, 7-15 through 7-18, 7-19 through 7-22, 7-23 through 7-28, 7-29 through 7-33, 7-34 through 7-39, 7-40 through 7-45, 7-46 through 7-53

flying duty, 7-8, 7-11 through 7-14, 7-15 through 7-18, 7-19 through 7-22, 7-23 through 7-28, 7-29 through 7-33, 7-34 through 7-39, 7-40 through 7-45, 7-46 through 7-53

mission, 7-8, 7-10 through 7-14, 7-15 through 7-18, 7-19 through 7-22, 7-23 through 7-28, 7-29 through 7-33, 7-34 through 7-39, 7-40 through 7-45, 7-46 through 7-53

Tactical operations center

communications, 5-12 through 5-15

jump, 5-9, 5-15

movement preparation, 5-14, 5-15

operational requirements, 5-13, 5-14

recovery operations, 5-14

security, 5-8, 5-9, 5-12

setup, 5-12

teardown, 5-13

Temporary worksheet

nonrated crewmember. See Nonrated crewmember flight records, temporary worksheet.

rated crewmember. See Rated crewmember flight records, temporary worksheet.

TOC. See tactical operations center.

Training

cross, 5-7

driver, 4-2, 5-7, 5-8

field operations, 5-7

generator, 5-9

guard, 5-8

gunner, 5-8

radio, 5-8

switchboard, 5-9

Two-way radio communications, 3-8

Unidentified flying objects, 2-1

Urgent change notice, D-1

Vehicle

drivers, 3-6 through 3-8, 4-2, 5-8, 5-9

markings, 3-6

movement, 3-6

preoperational checks, 4-2, 4-3

Water rescue, C-2

Weather

briefing, 2-4, 2-5, 2-7, 5-5

facility, 2-4, 2-5

FM 1-300

report, 2-5, 2-6, 5-11, 5-12

section, 2-4, 2-5

station, 5-6

warning, 2-2 through 2-5, 6-2

Wheel chock marking, 3-3

Wreckage, C-3

References

SOURCES USED

The following sources are quoted or paraphrased in this publication.

Army Regulations

AR 200-1. Environmental Protection and Enhancement. 21 February 1997.

AR 215-1. Nonappropriated Fund Instrumentalities and Morale, Welfare, and Recreation Activities. 29 September 1995.

Corps of Engineers Guide Specifications

CE-250.

CE-820.

These specifications are available from the US Army Publications Distribution Center, 1655 Woodson Rd., St. Louis, MO 63114-6181.

Federal Aviation Administration Advisory Circulars

FAA Advisory Circular 70/7460-1.

FAA Advisory Circular 150/5340-1D.

These publications are available from the Director, US Army Aeronautical Services Agency, ATTN: MOAS-AI, 9325 Gunston Rd., Suite N-319, Fort Belvoir, VA 22060-5582.

International Standardization Agreements

STANAG 2952 (Edition One)(Amendment Four). Procedures for Providing Restricted Areas for NATO Military Aircraft While Using Military Airfields of Other NATO Nations. 26 April 1994.

STANAG 3117 (Edition Six)(Amendment One). Aircraft Marshalling Signals. 26 September 1995.

US Army Aviation Branch Safety Office Publication

Guide to Aviation Resources Management for Aircraft Mishap Prevention, 12th Edition. March 1992.

This publication is available from the Aviation Branch Safety Office, ATTN: ATZQ-S, Fort Rucker, AL 36362-5034.

DOCUMENTS NEEDED

The following documents must be available to the intended users of this publication.

Army Regulations

- *AR 25-30. The Army Integrated Publishing and Printing Program. 28 February 1989.
- *AR 25-50. Preparing and Managing Correspondence. 21 November 1988.
- *AR 25-400-2. The Modern Army Recordkeeping System (MARKS). 26 February 1993.
- *AR 37-104-4. Military Pay and Allowances Policy and Procedures—Active Component
30 September 1994.
- *AR 95-1. Army Aviation: Flight Regulations. 30 May 1990.
- *AR 95-2. Air Traffic Control, Airspace, Airfields, Flight Activities, and Navigational Aids.
10 August 1990.
- *AR 95-3. Aviation: General Provisions, Training, Standardization, and Resource Management.
27 September 1990.
- *AR 95-10. DOD Notice to Airman (NOTAM System). 1 January 1997.
- *AR 95-11. Military Flight Data Telecommunications System. 26 August 1994.
- *AR 95-27. Operational Procedures for Aircraft Carrying Hazardous Materials.
11 November 1994.
- AR 220-15. Journals and Journal Files. 1 December 1983.
- *AR 385-40. Accident Reporting and Records. 1 November 1994.
- *AR 385-95. Army Aviation Accident Prevention. 20 May 1991.
- *AR 420-22. Preventive Maintenance and Self-Help Programs. 6 July 1976.
- *AR 420-72. Surfaced Areas, Bridges, Railroad Track, and Associated Appurtenances.
28 March 1991.
- *AR 420-90. Fire Protection. 25 September 1992.
- *AR 500-60. Disaster Relief. 1 August 1981.
- AR 525-90. Wartime Search and Rescue (SAR) Procedures. 25 February 1985.
- *AR 530-1. Operations Security (OPSEC). 3 March 1995.
- *AR 600-105. Aviation Service of Rated Army Officers. 15 December 1994.
- *AR 600-106. Flying Status for Nonrated Army Aviation Personnel. 2 March 1992.
- AR 600-8-22. Military Awards. 25 February 1995.
- *AR 600-8-105. Military Orders. 28 October 1994.

Department of the Army Forms

- *DA Form 201A. Field Personnel File Divider. 1 October 1971.
 - *DA Form 348. Equipment Operator's Qualification Record (Except Aircraft). 1 October 1964.
 - *DA Form 759. Individual Flight Record and Flight Certificate—Army. April 1998.
 - *DA Form 759-1. Individual Flight Record and Flight Certificate—Army, Aircraft Closeout
Summary. April 1998.
 - *DA Form 759-2. Individual Flight Record and Flight Certificate—Army, Flying Hours
Worksheet. September 1986.
 - *DA Form 759-3. Individual Flight Record and Flight Certificate—Army, Flight Record and
Flight Pay Work Sheet. August 1993.
 - *DA Form 1352. Army Aircraft Inventory, Status, and Flying Time. April 1993.
 - *DA Form 1594. Daily Staff Journal or Duty Officer's Log. 1 November 1962.
 - *DA Form 2028. Recommended Changes to Publications and Blank Forms. 1 February 1974.
- S)))))))))))))Q

*This source also was used to develop this publication.

Department of the Army Forms (Continued)

- *DA Form 2397-10-R. Technical Report of US Army Aircraft Accident—Part XI, Personnel Protective/Escapes/Survival/Rescue Data. July 1994.
- *DA Form 2407. Maintenance Request. July 1994.
- *DA Form 2408-12. Army Aviator's Flight Record. January 1992.
- DA Form 2408-13. Aircraft Status Information Record. October 1991.
- *DA Form 2696-R. Operational Hazard Report. March 1991.
- DA Form 2765. Request for Issue or Turn-In. April 1976.
- DA Form 2765-1. Request for Issue or Turn-In. April 1976.
- *DA Form 3513. Individual Flight Records Folder, United States Army. July 1995.
- *DA Form 3588. COMM Card. June 1992.
- DA Form 3643. Daily Issues of Petroleum Products. April 1985.
- DA Form 3644. Monthly Abstract of Issues of Petroleum Products and Operating Supplies. April 1985.
- *DA Form 4186. Medical Recommendation for Flying Duty. January 1985.
- DA Form 4702-R. Monthly Bulk Petroleum Accounting Summary. April 1985.
- DA Form 4702-R-E. Monthly Bulk Petroleum Accounting Summary. April 1985.
- DA Form 4730-R. Certificate for Performance of Hazardous Duty. March 1994.
- *DA Form 5484-R. Mission Schedule/Brief. February 1996.
- *DA Form 7120-R. Commander's Task List. August 1995.

Department of the Army Pamphlets

- *DA Pam 25-51. The Army Privacy Program—System Notices and Exemption Rules. 21 September 1988.
- *DA Pam 385-40. Aircraft Accident Investigation and Reporting. 1 November 1994.
- *DA Pam 738-751. Functional Users Manual for the Army Maintenance Management System—Aviation (TAMMS-A). 15 June 1992.

Department of Defense Flight Information Publication

- *DOD FLIP General Planning

This publication is available from the Director, US Army Aeronautical Services Agency, ATTN: MOAS-AI, 9325 Gunston Rd., Suite N-319, Fort Belvoir, VA 22060-5582.

Department of Defense Forms

- *DD Form 175. Military Flight Plan. May 1986.
- *DD Form 175-1. Flight Weather Briefing. September 1989.
- *DD Form 365-4. Weight and Balance Clearance Form F—Transport. April 1994.
- DD Form 1348-1A. Release/Receipt Document. July 1991.
- *DD Form 1801. DOD International Flight Plan. May 1987.
- *DD Form 1898. Avfuels Into-Plane Contract Sales Slip. August 1986.

*This source also was used to develop the publication.

FM 1–300

Department of Defense Publication

*Department of Defense Military Pay and Allowances Entitlement Manual (DOD 7000.14, Vol 7, Pt A). 1 January 1996.

Federal Aviation Administration Form

FAA Form 7233–1. Flight Plan.

This form is available from the Superintendent of Documents, Government Printing Office, Washington, DC 20402.

Federal Aviation Administration Handbooks

*FAAH 7110.10. Flight Services.

*FAAH 7110.65. Air Traffic Control.

FAAH 7340.1. Contractions.

*FAAH 7350.6. Location Identifiers.

*FAAH 7930.2. National Notice to Airmen (NOTAM) System.

These publications are available from the Director, US Army Aeronautical Services Agency, ATTN: MOAS–AI, 9325 Gunston Rd., Suite NB319, Fort Belvoir, VA 22060–5582.

Federal Aviation Regulations

*Airman's Information Manual.

*FAR, Part 139.

These publications are available from the Director, US Army Aeronautical Services Agency, ATTN: MOAS–AI, 9325 Gunston Rd., Suite NB319, Fort Belvoir, VA 22060–5582.

Federal Specifications and Standard

*Federal Specification L–S–300.

*Federal Specification TT–P–85.

*Federal Specification TT–P–115.

*Federal Specification TT–P1952.

*Federal Standard 595.

These publications are available from the Commander, Naval Inventory Control Point, ATTN: Customer Service, Bldg 1/Rm 3401, 700 Robbins Ave., Philadelphia, PA 19111–5098.

Field Manuals

FM 1–100. Army Aviation Operations. 21 February 1997.

FM 1–111. Aviation Brigades. 27 October 1997.

FM 1–112. Attack Helicopter Operations. 2 April 1997.

*This source also was used to develop this publication.

Field Manuals (Continued)

- FM 1-113. Assault Helicopter Battalion. 12 September 1997.
- FM 1-114. Tactics, Techniques, and Procedures for the Regimental Aviation Squadron. 20 February 1991.
- FM 1-120. Army Air Traffic Services Contingency and Combat Zone Operations. 22 May 1995.
- FM 1-230. Meteorology for Army Aviators. 30 September 1982.
- *FM 1-303. Air Traffic Control Facility Operations and Training. 5 April 1993.
- *FM 1-400. Aviator's Handbook. 31 May 1983.
- *FM 1-402. Aviator's Recognition Manual. 6 August 1984.
- FM 5-36. Route Reconnaissance and Classification. 10 May 1985.
- FM 5-103. Survivability. 10 June 1985.
- FM 8-10-6. Medical Evacuation in a Theater of Operations: Tactics, Techniques, and Procedures. 31 October 1991.
- *FM 10-20. Organizational Maintenance of Military Petroleum Pipelines, Tanks and Related Equipment. 29 February 1984.
- FM 10-67-1.
- *FM 10-67-2. Petroleum Laboratory Testing and Operations. 2 April 1997.
- *FM 10-68. Aircraft Refueling. 29 May 1987.
- *FM 10-69. Petroleum Supply Point Equipment and Operations. 22 October 1986.
- *FM 10-71. Petroleum Tank Vehicle Operations. 12 May 1978.
- *FM 11-50. Combat Communications Within the Division (Heavy and Light). 4 April 1991.
- FM 17-95. Cavalry Operations. 24 December 1996.
- FM 1930. Physical Security. 1 March 1979.
- FM 21-11. First Aid for Soldiers. 27 October 1988.
- FM 21-26. Map Reading and Land Navigation. 7 May 1993.
- *FM 21-60. Visual Signals. 30 September 1987.
- FM 22-6. Guard Duty. 17 September 1971.
- FM 24-17. Tactical Records Traffic System (TRTS). 17 September 1991.
- FM 24-33. Communications Techniques: Electronic Counter-Countermeasures. 17 July 1990.
- FM 25-101. Battle Focused Training. 30 September 1990.
- *FM 44-80. Visual Aircraft Recognition. 30 September 1996.
- *FM 55-9. Unit Air Movement Planning. 5 April 1993.
- *FM 90-18. (CSAR) Multi-Service Procedures for Combat Search and Rescue. 31 May 1991.
- *FM 101-5. Staff Organization and Operations. 25 May 1984.
- *FM 101-5-1. Operational Terms and Symbols. 21 October 1985.

Military Specifications

- *MIL-A-83411.
- *MIL-U-10866C.

These publications are available from the Commander, Naval Inventory Control Point, ATTN: Bldg 1/Rm 3401, 700 Robbins Ave., Philadelphia, PA 19111-5098.

This source also was used to develop this publication.

FM 1–300

National Fire Protection Association Standard

*NFPA Standard 10. Standard for Portable Fire Extinguishers. 1984.

This publication is available from the National Fire Protection Association, Battery March Park, Quincy, MA 02269.

Optional Form

OF 346. US Government Motor Vehicle Operator's Identification Card. November 1985.

Soldier Training Publications

*STP 1–93P1–SM. Soldier's Manual, MOS 93P, Aviation Operations Specialist, Skill Level 1
31 July 1996.

*STP 1–93P24–SM–TG. Soldier's Manual, Skill Levels 2/3/4, and Trainer's Guide, MOS 93P,
Aviation Operations Specialist. 31 July 1996.

*STP 21–1–SMCT. Soldier's Manual of Common Tasks, Skill Level 1. 1 October 1994.

*STP 21–24–SMCT. Soldier's Manual of Common Tasks, Skill Levels 2/3/4. 1 October 1992.

Standard Forms

SF 88. Report of Medical Examination. October 1994.

SF 368. Product Quality Deficiency Report. October 1985.

Technical Bulletin

*TB 5–4200–200–10. Hand Portable Fire Extinguishers Approved for Army Users.
30 September 1991.

Technical Manuals

TM 5–803–4. Planning of Army Aviation Facilities. 15 July 1983.

*TM 5–823–4. Marking of Army Airfield–Heliport Operational and Maintenance Facilities.
7 July 1987.

*TM 38–250. Preparing Hazardous Materials for Military Air Shipments. 25 November 1994.

*TM 1–1500–204–23–1. Aviation Unit Maintenance (AVUM) and Aviation Intermediate
Maintenance (AVIM) Manual for General Aircraft Maintenance (General Maintenance and
Practices) Volume 1. 31 July 1992

*TM 1–1500–204–23–2. Aviation Unit Maintenance (AVUM) and Aviation Intermediate
Maintenance (AVIM) Manual for General Aircraft Maintenance (Pneudraulics Maintenance
and Practices) Volume 2. 31 July 1992.

Training Circulars

*TC 1–201. Tactical Flight Procedures. 20 January 1984.

TC 1–204. Night Flight Techniques and Procedures. 27 December 1988.

*This source also was used to develop this publication.

Training Circulars

*TC 1-210. Aircrew Training Program: Commander's Guide to Individual and Crew Standardization. 3 October 1995.

READINGS RECOMMENDED

The following readings contain relevant supplemental information.

Air Weather Service Regulation

AWS 105-13. Flight Weather Briefing. 7 January 1991.

This publication is available from US Air Force Technical Orders/Publications, ATTN: ALC/TILUB, Tinker Air Force Base, OK 73145B9147

Army Regulations

AR 40-501. Standards of Medical Fitness. 30 August 1995.

AR 385-10. The Army Safety Program. 23 May 1988.

AR 525-1. The Department of the Army Command and Control System (DACCS). 2 December 1985.

AR 525-13. The Army Combatting Terrorism Program. 26 June 1992.

AR 525-25. Responsibilities for Tactical Air Control Parties. 6 June 1986.

Department of Defense Regulation

DOD Reg 4515.13-R. Department of Defense Air Transportation Eligibility Regulation. November 1994.

Field Manuals

FM 3-100. Chemical Operations, Principles, and Fundamentals. 8 May 1996.

FM 21-10. Field Hygiene and Sanitation. 22 November 1988.

FM 24-1. Signal Support in the AirLand Battle. 15 October 1990.

FM 31-70. Basic Cold Weather Manual. 12 April 1968.

FM 34-1. Intelligence and Electronic Warfare Operations. 27 September 1994.

FM 44-8. Small Unit Self-Defense Against Air Attack. 30 December 1981.

FM 55-60. Army Terminal Operations. 15 April 1996.

FM 63-2. Division Support Command, Armored, Infantry, and Mechanized Infantry Divisions. 20 May 1991.

FM 90-21. (JAAT) Multi-Service Procedures for Joint Air Attack Team Operations. 16 October 1991.

FM 100-10. Combat Service Support. 3 October 1995.

FM 100-20. Military Operations in Low Intensity Conflict. 5 December 1990.

FM 100-27. US Army/US Air Force Doctrine for Joint Airborne and Tactical Airlift Operations. 31 January 1985.

FM 704-28. Classes of Supply. 1 February 1979.

*This source also was used to develop this publication.